

Afrotropical Asilidae (Diptera) 14.
The genus *Neolophonotus* Engel, 1925. Part 3.
The *pellitus* species-group (Asilinae: Asilini)

by

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ABSTRACT

A taxonomic account is given of the *pellitus* species-group of the genus *Neolophonotus*, containing 42 species. Twenty-four new species are described.

New species: *bamptoni*, *bromleyi*, *coronatus*, *efflatouni*, *ensiculus*, *floccus*, *haplotherates*, *karooensis*, *megaphallus*, *melinus*, *membrana*, *munroi*, *niveus*, *occesilitus*, *pollex*, *raymondi*, *salina*, *sanchorus*, *satanus*, *sinuvena*, *spoliator*, *struthaulon*, *umbrivena*, *unicalamus*.

New synonyms: *A. amazaenes* Walker, 1849 & *N. dispar* Engel, 1927 = *A. abuntius* Walker, 1849; *D. transvaalensis* Ricardo, 1920 & *D. nigricans* Ricardo, 1920 = *L. albofasciatus* Ricardo, 1900; *L. pulcher* Loew, 1858, *N. rufus* Hull, 1967 & *N. rufulus* Oldroyd, 1981 = *A. micropterus* Macquart, 1838; *N. mamathesiana* Bromley, 1947 = *L. spiniventris* Loew, 1858.

Revised status: *L. albovittatus* Schiner, 1867 (previously synonymised with *L. pulcher* Loew, 1858) and *A. isse* Walker, 1849 (previously synonymised with *A. pellius* Wiedemann, 1819) are reinstated as valid species.

New combinations: *Antilophonotus maculipennis* Lindner, 1955, *Asilus micropterus* Macquart, 1838 & *Lophonotus heteronevrus* Macquart, 1838 are transferred to *Neolophonotus*.

INTRODUCTION

This is the third contribution in a series dealing with the genus *Neolophonotus*. In the first part (Londt 1985¹) I gave an account of my conclusions concerning the taxonomy of the genus, and the reader should consult that paper before using any of the subsequent parts. In the first part I subdivided the genus into six species-groups and dealt with three of the smaller of these (*viz.* *chionthrix*, *squamosus* and *angustibarbus* species-groups). In the second part (Londt 1986²) I dealt with the *suillus* species-group (including the genotype—*suillus*). In this contribution I survey the fifth group, the *pellitus* species-group. This leaves the largest of the groups (the *comatus* species-group) to be the subject of the final part.

TAXONOMY

The *Neolophonotus pellitus* species-group

This species-group is characterised by the following combination of characters: hind coxae possess well-developed bristles as well as fine setae; postpronotal lobes bare; mane clearly divided into a dark red-brown (or black) anterior part (may be bordered by short white setae) and a white (or pale yellow) posterior part (the transition taking place at approximately the level of the transverse suture).

¹ Ann. Natal Mus. 27(1): 39–114.

² Ann. Natal Mus. 27(2): 513–600.

TABLE 1

The distribution and seasonal incidence of species belonging to the *Neolophonotus pellitus* species-group.

Species	Distribution (Climatic regions)													Seasonal incidence (Months of the year)											
	M	A	K	W	S	SE	E	D	L	H	NT	B	Z	J	F	M	A	M	J	J	A	S	O	N	D
<i>abuntius</i>	*	—	*	*	*	—	—	—	—	—	—	—	—	*	—	*	—	*	—	*	*	*	*	*	*
<i>albocuneatus</i>	*	—	—	—	—	—	—	—	—	—	—	—	—	*	*	*	—	—	—	—	*	—	*	*	*
<i>albofasciatus</i>	—	*	*	*	*	*	—	*	—	*	*	*	—	—	—	—	—	—	—	*	*	*	*	*	*
<i>albovittatus</i>	“Cap.”													no data											
<i>bamptoni</i>	—	—	—	—	—	—	—	—	—	—	—	—	*	—	—	—	—	—	—	—	—	—	—	—	—
<i>brevipennis</i>	*	*	*	*	—	—	—	—	—	—	—	—	—	*	*	—	—	*	*	*	*	*	*	*	*
<i>bromleyi</i>	—	—	—	—	—	—	—	—	—	—	—	—	*	*	—	—	*	*	—	—	—	—	—	—	—
<i>coronatus</i>	—	—	—	*	—	—	—	—	—	—	—	—	—	—	—	—	—	*	—	—	—	—	—	—	—
<i>efflatouni</i>	—	—	—	—	—	—	—	—	—	—	—	—	*	—	—	—	—	—	—	—	—	—	—	—	—
<i>ensiculus</i>	—	—	—	*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*	—	—	—	—
<i>floccus</i>	*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*	*	*	—
<i>gemsbock</i>	—	—	*	*	*	—	*	*	*	—	*	*	*	—	*	*	*	*	*	*	*	*	*	—	—
<i>haplotherates</i>	—	—	—	*	—	—	—	—	—	—	—	—	—	no data											
<i>heteronevrus</i>	*	—	—	*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*	*	*	*	*
<i>isse</i>	*	—	—	*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*	*	*	*	*
<i>karooensis</i>	—	—	*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*
<i>maculipennis</i>	—	—	—	—	—	—	—	—	—	—	—	—	*	—	—	—	*	—	—	—	—	—	—	—	—
<i>marshalli</i>	—	—	—	—	—	—	*	—	—	—	—	*	—	—	*	*	*	*	*	*	—	*	—	—	—
<i>megaphallus</i>	—	—	—	*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*	*	—	—	—
<i>melinus</i>	*	*	*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*	*	*	*
<i>membrana</i>	—	—	—	—	*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*	—	—	—
<i>micropterus</i>	*	—	—	—	—	—	?	—	—	—	—	—	—	*	*	—	—	—	—	—	*	—	*	*	*
<i>minutus</i>	*	*	—	—	—	—	—	—	—	—	—	—	—	*	*	—	—	—	—	—	—	*	*	*	*
<i>molitor</i>	—	*	—	—	*	—	—	—	—	—	—	—	—	*	—	—	—	—	—	—	—	*	*	*	*
<i>munroi</i>	—	—	—	*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*	—	—	—
<i>niveus</i>	—	—	—	*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*	—	*	—	—
<i>occesilitus</i>	—	—	—	*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*	—	—	—	—
<i>ochrochaetus</i>	—	*	*	—	—	—	—	—	—	—	—	—	—	*	—	*	—	—	—	—	—	*	*	*	*
<i>pellitus</i>	*	—	*	—	—	—	—	—	—	—	—	—	—	—	*	—	—	—	—	—	*	*	*	*	*
<i>pollex</i>	—	*	—	—	—	—	—	—	—	—	—	—	—	*	—	—	—	—	—	—	—	—	—	—	—
<i>raymondi</i>	—	—	—	*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*	—	—	—
<i>salina</i>	—	—	—	—	—	—	—	—	—	—	—	*	—	—	*	—	—	—	—	—	—	—	—	—	—
<i>sanchorus</i>	—	—	—	*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*	—	—	—
<i>satanus</i>	—	—	—	—	—	*	—	—	—	—	—	*	—	—	*	*	*	*	*	—	*	*	—	*	*
<i>setiventris</i>	—	—	*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*	*	*
<i>sinuvena</i>	*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*	—	*	*
<i>spiniventris</i>	*	—	—	—	*	—	—	—	*	—	*	*	*	—	*	*	*	—	—	—	—	*	*	*	*
<i>spoliator</i>	—	—	—	*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*	*	*	—	—
<i>struthaulon</i>	—	—	—	*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*	—	—
<i>umbrivena</i>	*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*	—	—	—	—
<i>unicalamus</i>	—	—	—	*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*	—	—	—
<i>vansoni</i>	—	—	—	—	*	—	—	—	—	—	*	*	*	—	*	*	*	*	*	*	*	*	—	—	—

Abbreviations: M — Mediterranean region of south-western Cape.
 A — Southern Cape Coastal region.
 K — Little and Great Karoo region.
 W — Desert and Poor Steppe region.
 S — Southern and Northern Steppe region.
 SE — South-eastern Cape Coastal region.
 E — Subtropical region.
 D — Drakensberg region.
 L — Transvaal Lowveld region.
 H — Highveld region.
 NT — Northern Transvaal region.
 B — Botswana and Northern Namibian region.
 Z — Localities north of South Africa and Namibia.

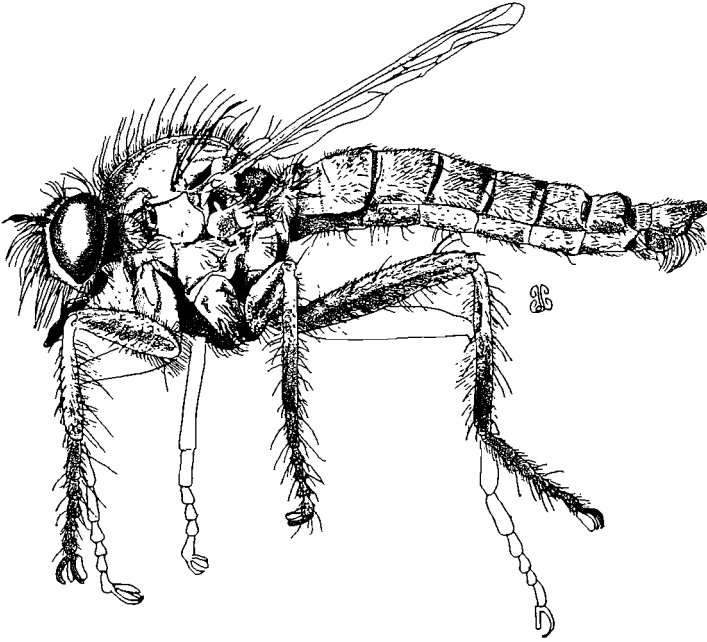


Fig. 1 Lateral aspect of *Neolophonotus pellitus* (Wiedemann, 1819).

Most of the species possess well-developed bristles on both the terga and sterna (not necessarily all of them). All the species appear to inhabit open areas and are frequently encountered on the ground.

Key to the species of the *Neolophonotus pellitus* species-group

The following key is for the identification of male specimens only. In all instances the reader is urged to check the identification by clearing and examining the genitalia and comparing them with the drawings provided in this paper. The male genitalia are most important in the taxonomy of this group.

A feature found useful in the separation of these species is the size of what is here called the 'basal angle of cell r_4 '. This angle is measured as illustrated in Fig. 2.

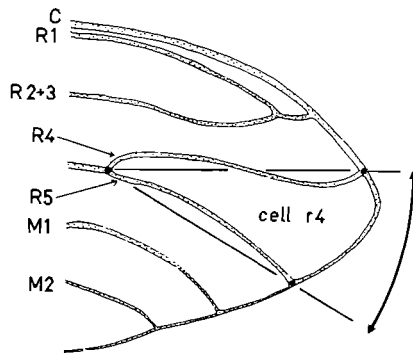


Fig. 2. Tip of wing showing how the basal angle of cell r_4 is measured.

- 1 Cell R_5 closed and stalked (Figs 26, 63) 2
- Cell R_5 open at wing margin 3
- 2 Wing membrane with characteristic stain in the region of cell R_5 (Fig. 63); ♂ genitalia as in Figs 64–66 **heteronevrus** (Macquart)
- Wing membrane lacking marks; ♂ genitalia as in Figs 27–29 **brevipennis** (Macquart)
- 3 Basal angle of cell r_4 greater than 30° 4
- Basal angle of cell r_4 smaller than 30° 15
- 4 Stalk of cell r_1 and tip of vein R_4 brown-stained and bent strongly anteriorly (Fig. 147); ♂ genitalia as in Figs 148–150 **sinuvena** sp. n.
- Wing venation not as above 5
- 5 Male epandrium with a finger-like process on mesial (internal) face (Figs 75, 173) 6
- Male epandrium without finger-like process on mesial face 10
- 6 Wing with characteristic dark-shaded veins as in Figs 73 & 171 7
- Wing membrane not shaded in this manner 8
- 7 Disc of scutellum with well-developed bristles; ♂ genitalia as in Figs 74–76 ... **maculipennis** (Lindner)
- Disc of scutellum with fine setae only and lacking bristles; ♂ genitalia as in Figs 172–174 **vansoni** Bromley
- 8 Disc of scutellum with well-developed bristles; ♂ genitalia as in Figs 33–35 **bromleyi** sp. n.
- Disc of scutellum with fine setae only and lacking bristles 9
- 9 Male genitalia as in Figs 23–25 **bamptoni** sp. n.
- Male genitalia as in Figs 135–137 **salina** sp. n.
- 10 Male aedeagus long and thin (Figs 50, 77) 11
- Male aedeagus not greatly attenuated 14
- 11 Aedeagus strongly sinuous; ♂ genitalia as in Figs 77–79 **marshalli** Hobby
- Aedeagus not strongly sinuous 12
- 12 Disc of scutellum lacking bristles; ♂ genitalia as in Figs 39–41 **efflatouni** sp. n.
- Disc of scutellum with well-developed bristles 13
- 13 Male genitalia as in Figs 50–52 **gemsbock** Bromley
- Male genitalia as in Figs 141–143 **satanus** sp. n.
- 14 Disc of scutellum with well-developed bristles; ♂ genitalia as in Figs 100–102 **minutus** Hull
- Disc of scutellum with fine setae only; ♂ genitalia as in Figs 46–49 **flocus** sp. n.
- 15 Acrostichals absent, or so poorly developed as to be considered absent .. 16
- Acrostichals well developed in anterior region of mesonotum 20
- 16 Wing membrane with characteristic markings as in Fig. 3; ♂ genitalia as in Figs 4–6 **abuntius** (Walker)
- Wing membrane lacking these markings 17
- 17 Mystax black (may have one or two white setae); ♂ genitalia as in Figs 7–10 .. **albocuneatus** Hull
- Mystax black and white or black and yellow 18

- 18 Mystax with black and white setae in central part; ♂ genitalia as in Figs 129–131 **pollex** sp. n.
- Mystax yellow in central part 19
- 19 Male genitalia as in Figs 70–72 **karooensis** sp. n.
- Male genitalia as in Figs 144–146 **setiventris** (Loew)
- 20 Disc of scutellum without well-developed bristles 21
- Disc of scutellum with well-developed bristles amongst fine setae 27
- 21 Wingtip extensively covered with dark microtrichia, giving a grey, shaded appearance (Fig. 90); ♂ genitalia as in Figs 93–98 .. **micropterus** (Macquart)
- Wingtip not extensively covered with microtrichia 22
- 22 Pale bristles of metanepisternum white 23
- Pale bristles of metanepisternum yellow 24
- 23 Hind tarsi extensively covered with white setae; ♂ genitalia as in Figs 115–117 **niveus** sp. n.
- Hind tarsi with only a few white setae on first segment; ♂ genitalia as in Figs 157–159 **spoliator** sp. n.
- 24 Winglength < 7 mm 25
- Winglength > 7 mm 26
- 25 Male genitalia as in Figs 106–108 **molitor** (Wiedemann)
- Male genitalia as in Figs 118–120 **occesilitus** sp. n.
- 26 Scutellar setae arranged in three discrete groups; ♂ genitalia as in Figs 67–69 **isse** (Walker)
- Scutellar setae covering disc fairly uniformly; ♂ genitalia as in Figs 167–170 **unicalamus** sp. n.
- 27 Anterior face of fore femur lacking central bristle 28
- Anterior face of fore femur with one or two centrally-situated short bristles 30
- 28 Long proclinate upper-occipital setae white; ♂ genitalia as in Figs 138–140 **sanchorus** sp. n.
- These setae black 29
- 29 Male genitalia as in Figs 80–82 **megaphallus** sp. n.
- Male genitalia as in Figs 112–114 **munroi** sp. n.
- 30 Veins bordered with light brown stain as in Fig. 163; ♂ genitalia as in Figs 164–166 **umbrivena** sp. n.
- Wing membrane not so marked 31
- 31 Wing with subapical stain as in Fig. 86 (weak in *ensiculus*) 32
- Wing without such markings 33
- 32 Mystax with black, white and yellow setae; wing marked as in Fig. 42; ♂ genitalia as in Figs 43–45 **ensiculus** sp. n.
- Mystax uniform yellow; wing marked as in Fig. 86; ♂ genitalia as in Figs 87–89 **membrana** sp. n.
- 33 Long proclinate upper-occipital setae shiny orange; ♂ genitalia as in Figs 36–38 **coronatus** sp. n.
- These setae black (at most 1–2 white ones present) 34
- 34 All metanepisternal bristles black 35

- Metanepisternal bristles predominantly white or yellow (a few black may be present) 36
- 35 Mystax with white setae bordered by well-developed bands of black setae; ♂ genitalia as in Figs 132–134 **raymondi** sp. n.
- Mystax variable from almost completely white to mixed black and white (black not clearly bordering white) **pellitus** (Wiedemann)
- 36 Central region of mystax with black and white setae 37
- Central region of mystax with yellow or white setae 38
- 37 Metanepisternal bristles orange; ♂ genitalia as in Figs 11–13 **albofasciatus** (Ricardo)
- Metanepisternal bristles white; ♂ genitalia as in Figs 60–62 **haplotherates** sp. n.
- 38 Pale setae of metanepisternum white; ♂ genitalia as in Figs 160–162 **struthaulon** sp. n.
- Pale setae of metanepisternum yellow or orange 39
- 39 Ventral bristles on hind femur mostly dark red-brown or black 40
- These bristles all yellow 41
- 40 Male genitalia as in Figs 121–123 **orchrochaetus** Hull
- Male genitalia as in Figs 125–127 **pellitus** (Wiedemann)
- 41 Hypandrium with a thin membranous hook-shaped flange dorsally (viewed in lateral aspect); ♂ genitalia as in Figs 151–153 **spiniventris** (Loew)
- Hypandrium lacking dorsal flange 42
- 42 Male genitalia as in Figs 20–22 **albovittatus** (Schiner)
- Male genitalia as in Figs 83–85 **melinus** sp. n.

Neolophonotus abuntius (Walker, 1849)

Figs 3–6

Asilus abuntius Walker, 1849: 449–50; Walker, 1855: 713.

Asilus amazaenes Walker, 1849: 447; Walker, 1855: 714, **syn. n.**

Dysmachus abuntius; Kertész, 1909: 274.

Dysmachus amazaenes; Kertész, 1909: 274.

Neolophonotus (Lophybus) dispar Engel, 1927: 164–5; Hull, 1962: 533, **syn. n.**

Neolophonotus (Lophopeltis) abuntius; Hull, 1962: 533.

Neolophonotus amazaenes; Hull, 1962: 532; Oldroyd, 1981: 340.

Neolophonotus abuntius; Oldroyd, 1981: 340.

Neolophonotus dispar; Oldroyd, 1981: 340.

Redescription based on lectotype female, with notes on the male taken from the holotype of *dispar*.

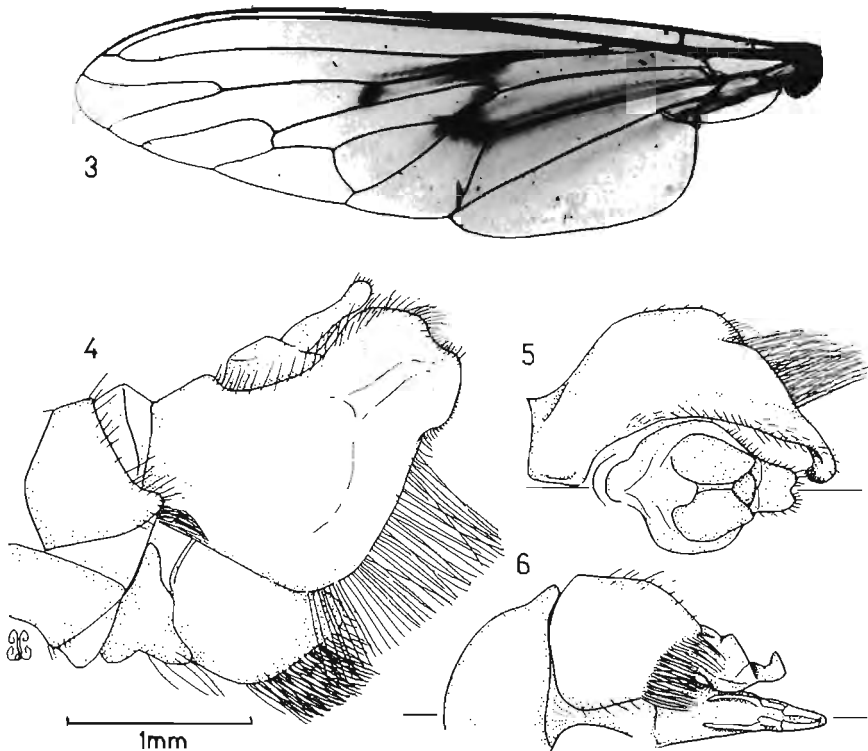
Head: Scape and pedicel dark red-brown to black (flagellum broken off—dark red-brown in male); setae black and white mixed (no white ventrally on pedicel). Eye:face ratio 1:0.26; eye:lower facial margin ratio 6.6:1. Mystax yellow-white, a few black setae laterally on lower facial margin only. Occipital setae: upper—long, dark red-brown; central—dark red-brown (a few yellow); lower—longish white.

Thorax: ktg s yellow and black; mtanepst s dark red-brown and yellow. Mesonotal setae: acr not evident; dc not evident (probably broken off—ca 6 black in other specimens); pprn bare; 3/3 dark red-brown npl; 2/2 spal (broken—are dark red-brown in other specimens); 2/2 dark red-brown pal. Mane short, dark red-brown

anteriorly, white and dark red-brown posteriorly. Scutellum with 8 black marginal bristles, disc with *ca* 6 black bristles and yellow and dark red-brown setae. Wing $9,2 \times 3,2$ mm; membrane characteristically marked with dark brown patches (Fig. 3— δ lectotype *dispar* illustrated); basal angle of cell r_4 — 23° . Legs dark red-brown with tibiae paler proximodorsally; cx1 with white setae anteriorly; cx3 with 1 yellow bristle laterally. Hind femur with all bristles yellow, long setae brown and white, short setae whitish-yellow.

Abdomen: Dark red-brown, fine gold-silver pruinose. T3 with 2–3 marginal bristles (1 is white, others missing); fine setae white except for a strip of black ones dorsally. S3 with white and brown setae (poorly mounted specimen—other specimens have white bristles on hind margin).

Male: Similar to female except for the following major differences. Mystax white (centrally) and black (laterally). Scutellum with 6 black marginal bristles; disc with 2 black bristles and white (many) and black (few) setae. Wing $9,6 \times 3,5$ mm, marked as in female. T3 with fine black setae only; S3 with fine, long, black setae. δ genitalia as in Figs 4–6; epandrium with a cluster of shiny yellow setae posteroventrally (see remarks); gonocoxite with a clump of short stiff black setae distally; aedeagus short and stout, with tapering tip.



Figs 3–6. *Neolophonotus abuntius* (Walker, 1849), lectotype δ of *dispar*. 3. Wing. 4–6. δ genitalia. 4. Lateral. 5. Dorsal. 6. Ventral.

Lectotype designation: Walker indicated that he saw only the female but did not indicate how many specimens were examined. The BM collection contains two females (one in a poor state) which must be considered syntypes or cotypes. I hereby designate the better specimen the lectotype and have labelled it as such, and the other as a paralectotype. I am not aware of any other specimens which could have been in Walker's type series.

Engel did not designate a holotype for *dispar*; I hereby designate the ZSM ♂ as lectotype and the ZSM ♀ as paralectotype.

Synonymy: The synonymy of *dispar* with *abuntius* is obvious, but the synonymy of *amazaenes* requires explanation. The female specimen(s) upon which the description was based cannot be found in the BM and is probably lost. The description suggests that this species is *abuntius*. The slight colour differences noted fall within the range of variation seen in *abuntius*. In Walker's (1855) key the two species fall together in the same couplet and are separated on only the colour of the tibiae (*abuntius*—'nigrae': *amazaenes*—'obscure fulva'), a variable character. In the interests of taxonomic stability I consider *amazaenes* to be a synonym of *abuntius*.

Remarks: Male specimens from Namaqualand possess a bright yellow mystax and both black and white epandrial setae. For the present I consider these differences to be regional variation.

Material examined: SOUTH AFRICA: 2♀ (lectotype & paralectotype), S. Afr., Dr Smith, 44–6, 'one of Walker's so named', 'E.A.W.' (BM). 1♂, South Africa, ix.1947, BvdM (NM); *Cape Province*: 1♂ (lectotype of *dispar*), Capland, Stellenbosch (3318DD), xii.1924, Dr Brauns (ZSM); 1♀ (paralectotype of *dispar*), Stellenbosch, 5.xi.1925, Dr H. Brauns (ZSM); 1♀, Stellenbosch, 12.xi.1926, Brauns (ZSM); 2♂, Stellenbosch, Brauns (ZSM); 29♂ 19♀ 2?, Stellenbosch, xi.1924, 5, 25.ix., 3.xii.1925, 8, 12, 20, 25.x., 4, 5, 10, 12, 13, 15, 25.xi.1926, Brauns (NM); 1♂, Stellenbosch, 8.vii.1940 (NM); 1♂, Stellenbosch, 5.v.1944 (NM); 1♂, Stellenbosch, 27.xi.1943, Le Roux (NM); 1♀, Stellenbosch, x.1948, Buys (NM); 4♂, Stellenbosch, 21.ix.1924, 20.ix.1936, 8.ix.1942, 20.x.1928, Ac US (NM); 1♀, Jonkershoek (3318DD) Stellenbosch, 12.iii.1967, Geertsema (NM); 1♂, George (3322CD), x.1922, Brauns (NM); 1♂, Willowmore (3323AD), 1.xii.1908, Brauns (NM); 1?, Robinson's Pass (3322CC) Mossel Bay, 30.ix.1921, Brauns (NM); 2♂ 2♀, Klaver (Klawer—2017CC), 19.ix.1917, Roberts (NM); 1♂, Tulbagh (2228CC), xi.1910, Lightfoot (ZSM); 1♀, O'Okiep (2917DB), 5.xii.1885 (ZSM); 1♂ Franschoek (3319CC), 4.xii.1942, Van Heerden (NM); 2♂, Karroo at junction of Calvinia–Sutherland Rd nr Inverdoorn (3319BB) Ceres, 2–3.x.1959, Stuckenberg (NM); 1♂, Sevenweekspoort (3321AD) Laingsburg Dist, 19–22.ix.1959, Stuckenberg (NM); 2♂, Clanwilliam (3218BB), ix.1928, Brauns (NM); 1♂ 1♀, 12 km SW Clanwilliam (3218BB) Kransvlei R., 5.x.1977, Miller (NM); 2♂ 1♀, 32 km NE Clanwilliam (3219AA) Brandewyn R., 2–3.x.1977, Miller (NM); 1♀, Uniondale (3323CA), 12.xii.1979, Londt & Stuckenberg, steep hillside macchia (NM); 1♂ 2♀, Meiringspoort (3322BC), 11–12.xii.1979, Londt & Stuckenberg, rocky hillside & stream edge (NM); 2♂, 3 km S Darling (3318AD), 28.ix.1979, Londt, well veget. hillside above wheatlands (NM); 1♂ 1♀, 1 km NE Uniondale (3323CA), 31.x.1978, Miller & Londt, rocky hillside scrub (NM); 2♂ 2♀, 9 km SW

Willowmore (3323AD), 30–31.x.1978, Londt & Miller, open Karoo scrub (NM); 3♂ 2♀, Willowmore, 6.x.1971, Gess (AM); 1♂, Outskirts of Klawer (3118DC), 2.ix.1981, Londt, Schoeman & Stuckenberg, Succulent Karoo (NM); 1♀, Montague Bot. Garden (3320CC), 10.ix.1981, Londt, Schoeman & Stuckenberg, Karroid Broken Veld (NM); 3♂ 1♀, 25 km N Kamieskroon (2917DD), 5.ix.1983, Stuckenberg & Londt, rocky hillside veget. (NM); 4♂, Studers Pass, 22 km NE of Garies (3018AC), 6.ix.1983, Londt & Stuckenberg, stream edge & rocky slopes (NM); 3♂ 1♀, 10 km E Kamieskroon (3018AA), 17.x.1977, Miller, 630 m (NM); 1♂, 10 km W Garies (3018CA), 3.ix.1981, Londt, Schoeman & Stuckenberg, Namaqual. Broken Veld (NM); 1♂, Bitterfontein (3118AB), 14.ix.1982, Schoeman (NM); 1♀, Wolvehoek, 31°51'S:20°34'E, 26.x.1981, Schoeman (NM); 2♂, Namaqualand, Bowesdorp (3017BB), ix.1941, Mus. Staff (SAM); 5♂ 11♀, Bowesdorp, xi.1931, Mus. Staff (SAM); 5♂ 9♀, Klip Vlei Garies (3018CA), xi.1931, Mus. Staff (SAM); 13♂ 11♀ 1?, Btw Kamieskroon and Springbok (2917DD), x.1939, Mus. Staff (SAM); 2♂, Knersvlakte (3118BC), x.1939, Mus. Staff (SAM); 1♀, Aggenys (Aggeneys—2918BB) or Bushmanland btw Springbok & Pella, x.1939, Mus. Staff (SAM); 1♂, Du Toit's Kloof (3319CA), 29.xii.1961, Nat. Mut. S. R. (NMZ); 1♂, Van Rhyns Pass (Vanrhynspas—3119AC), 21.xi., J. O. (AMNH); 1♀, Kod Pienaar's Farm (?), 14.xi.1983, Pinhey (NM); 7♂ 3♀, Clanwilliam (3218BB) Nardouw, ix.1941, Mus. Staff (SAM); 2♂ 1♀, 4 m S Clanwilliam, ix.1961, SAM (SAM); 5♂ 13♀, Olifants River bet. Citrusdal (3219CA) & Clanwilliam, x–xi.1931, Mus. Staff (SAM); 24♂ 34♀, Citrusdal Distr., xi.1948, Mus. Expd. (SAM); 31♂ 53♀ 1?, Bulhoek (3125CC) Klaver—Clanw., x.1950, Mus. Expd. (SAM); 3♂ 4♀, 18 m E Touws R. to Hondewater (3320AC), xii.1962, SAM (SAM); 3♂ 1♀ Moordenaars Karoo, Lammerfontein (3220DD), x.1952, Mus. Expd. (SAM); 2♂ 3♀ ??, Het Kruis (3218DA), x.1947, Mus. Expd. (SAM); 2♂ 2♀, Paleishheuwel (3218BC), xi.1948, Mus. Expd. (SAM); 1♂ 1♀, Montagu (3320CC), x.1919, Tucker (SAM); 1♂ 1♀, Montagu, xi.1919, Lightfoot (SAM); 2♂, Uniondale Dist. (3323CA), x.1952, Mus. Expd. (SAM); 1♀, Worcester (3319CB) Du Toit's Kloof, 17.x.1966, SAM (SAM); 1♂ Oudtshoorn, Zebra (3322CB), x.1951, Mus. Expd. (SAM); 2♂, near Doornbosch (3324AC), ix.1961, SAM (SAM); 1♀, Constable (2523CD), xii.1962, SAM (SAM); 2♀, Leipoldtville (3218AB), xi.1956, SAM (SAM); 1♀, Leipoldtville—Eland's Bay, x.1947, Mus. Expd. (SAM); 1♂, Gamka's Poort (?), x.1952, Mus. Expd. (SAM); 6♀ ??, East of Pakhuis Pass (3218BB), ix.1947, Mus. Expd. (SAM); 1♀, O'Okiep (2917DB), xi.1885 (SAM); 1♀, Bitterfon. (Bitterfontein—3118AB), x.1885 (SAM); 1♂, Cold Bokkeveld, Ceres Dist. (3319AD), 15–30.x.1934, Versfeld (SAM); 1♀, Spitskop, Meiring's Poort (3322BC), i.1935, Mus. Staff (SAM); 1♂, Michell's Pass (3319AD), Ceres Dist., x.1934, Mus. Staff (SAM); 1♂, Bidouw Pass (3219AB), 8.ix.1983, Whitehead (SAM); 1♂, Oorlogskloof, Nieuwoudtville (3119AC), Whitehead (SAM).

Distribution: Recorded from five regions (Table 1) centred in the South-western Cape Province.

Prey records: Diptera: Muscidae (1), Hymenoptera: Apidae (1). A male has a note attached which reads 'Fly found carrying *Thestor holmse* ♂' (Lepidoptera: Lycaenidae).

Neolophonotus albocuneatus Hull, 1967

Figs 7–10

Neolophonotus (Lophopeltis) albocuneatus Hull, 1967: 269–70.*Neolophonotus albocuneatus*; Oldroyd, 1981: 340.

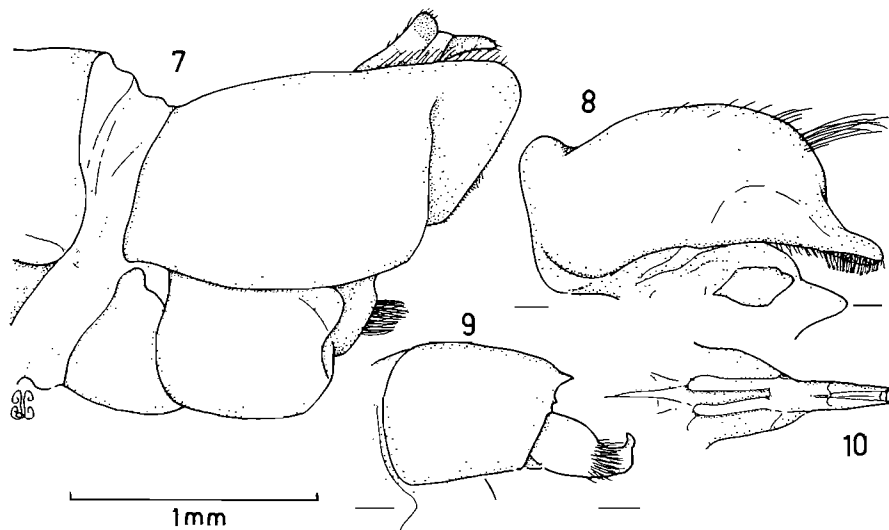
Redescription: Based on the holotype male.

Head: Antennae dark red-brown to black (joints paler brown); setae dark red-brown ventrally, dark red-brown and white dorsally). Eye:face ratio 1:0,24; eye: lower facial margin ratio 5,8:1. Mystax dark red-brown to black (tips of setae paler—almost white. Occipital setae: upper—long dark red-brown; central—dark red-brown; lower—longish white.

Thorax: ktg s and mtanepst s yellow. Mesonotal setae: acr not evident; dc black, *ca* 8 pairs, go anterior of suture; pprn bare; 3/3 black npl; 3/3 black spal; 2/2 black pal. Mane short black anteriorly, white posteriorly (white setae extend just anterior to suture). Scutellum with 4 black marginal bristles, disc with *ca* 4 black bristles and three clusters of white setae. Wing 8,7 × 2,7 mm; membrane transparent, with dark microtrichia on anterior margin near tip; basal angle of cell r_4 —25°. Legs dark red-brown with apices of tibiae paler proximodorsally; cx1 with white setae anteriorly; cx3 with 2–3 white bristles laterally. Hind femur: bristles dark red-brown and yellow, long and short setae dark red-brown (ventrally) and white (dorsally).

Abdomen: Black, silver pruinose. T3 with *ca* 5 dark red-brown marginal bristles; fine setae dark red-brown except for a few white ones laterally. S3 with *ca* 10 dark red-brown bristles and brown setae. ♂ genitalia as in Figs 7–10; gonostylus with a clump of setae posteroventrally; aedeagus short and stout, with tapering tip.

Female: Similar to ♂ but mystax mostly yellow; bristles of abdomen also mostly yellowish.



Figs 7–10. *Neolophonotus albocuneatus* Hull, 1967 holotype ♂ genitalia. 7. Lateral. 8. Dorsal. 9. Ventral. 10. Aedeagus in ventral view.

Material examined: SOUTH AFRICA: *Cape Province*: 1♂ (holotype), Cape peninsula, Hout Bay (3418AB), Skoorsteenkop, 28.i.1951, Brinck & Rudebeck, 250–500 ft (ZML); 6♂, Jonkershoek (3318DD), 7, 9, 11, 13.xii.1979, 28.i.1981, Giliomee (NM); 1♂, Jonkershoek, 27.iii.1953, Heyns (NM); 1♂, Macchia slopes above Muizenberg—Cape Town (3418AB), 28.xi.1981, Stuckenberg (NM); 2♂ 1♀, French Hoek (Franschhoek—3319CC), i.1936, Wood (SAM); 1♂, Du Toit's River, Franschhoek Pass, Swellendam Dist., 25.ii.1984, Stuckenberg (NM); 2♂ 3♀, Gt. Wint-hoek, Tulbagh (2228CC), xi.1916, Lightfoot, 4500 ft (SAM); 1♂, Matroosberg (3319BC), ix.1939, Mus. Staff (SAM); 1♂ 3♀, Ceres Div., Matroosberg, xi.1917, Lightfoot, 2500' (1♀) 4000' (1♂ 1♀) 5000' (1♀) (SAM); 1♂ 1♀, R. Sonder End (3419BB), Oudebosch, xi–xii.1928, Barnard, 1500' (SAM); 2♂ 1♀, Wit River Valley, Bains Kloof (3319CA), xii.1949, Mus Exp (SAM); 5♂ 8♀, Upper Sources Olifants River, Ceres (3319AD), xii.1949, Mus Exp (SAM).

Distribution: Known only from the Mediterranean climatic region.

Previously recorded material: Hull (1967) listed 2♂ and 4♀ from the Cape Province, and 1♀ from Namibia. While I have only examined the male holotype and the Namibian female, I am prepared to accept that the other specimens are probably conspecific with the holotype. The paratype from Namibia, however, is not conspecific, being an example of *N. trilobius* Londt, 1985, a species belonging to the *angustibarbus* species-group. *N. trilobius* inhabits the drier parts of the northern Cape Province and Namibia. This specimen, not recorded under the description of the species, carries the following label data: Kaokoveld, Anabib (1812BA), Orupembe, 100 miles W Ohopoho, 7–9.vi.1951, Brinck & Rudebeck, No. 330 (ZMB).

Neolophonotus albofasciatus (Ricardo, 1900)

Figs 11–19

Lophonotus albofasciatus Ricardo, 1900: 178.

Dysmachus transvaalensis Ricardo, 1920: 387–8, **syn. n.**

Dysmachus albofasciatus; Ricardo, 1920: 388.

Dysmachus nigricans Ricardo, 1920: 436–7, **syn. n.**

Neolophonotus (Lophopeltis) albofasciatus; Engel, 1927: 170–1; Hull, 1962: 533; Hull, 1967: 268.

Neolophonotus (Lophopeltis) nigricans; Hull, 1962: 533.

Neolophonotus (Lophopeltis) transvaalensis; Hull, 1962: 533.

Neolophonotus albofasciatus; Oldroyd, 1981: 340.

Neolophonotus nigricans; Oldroyd, 1981: 341.

Neolophonotus transvaalensis; Oldroyd, 1981: 341.

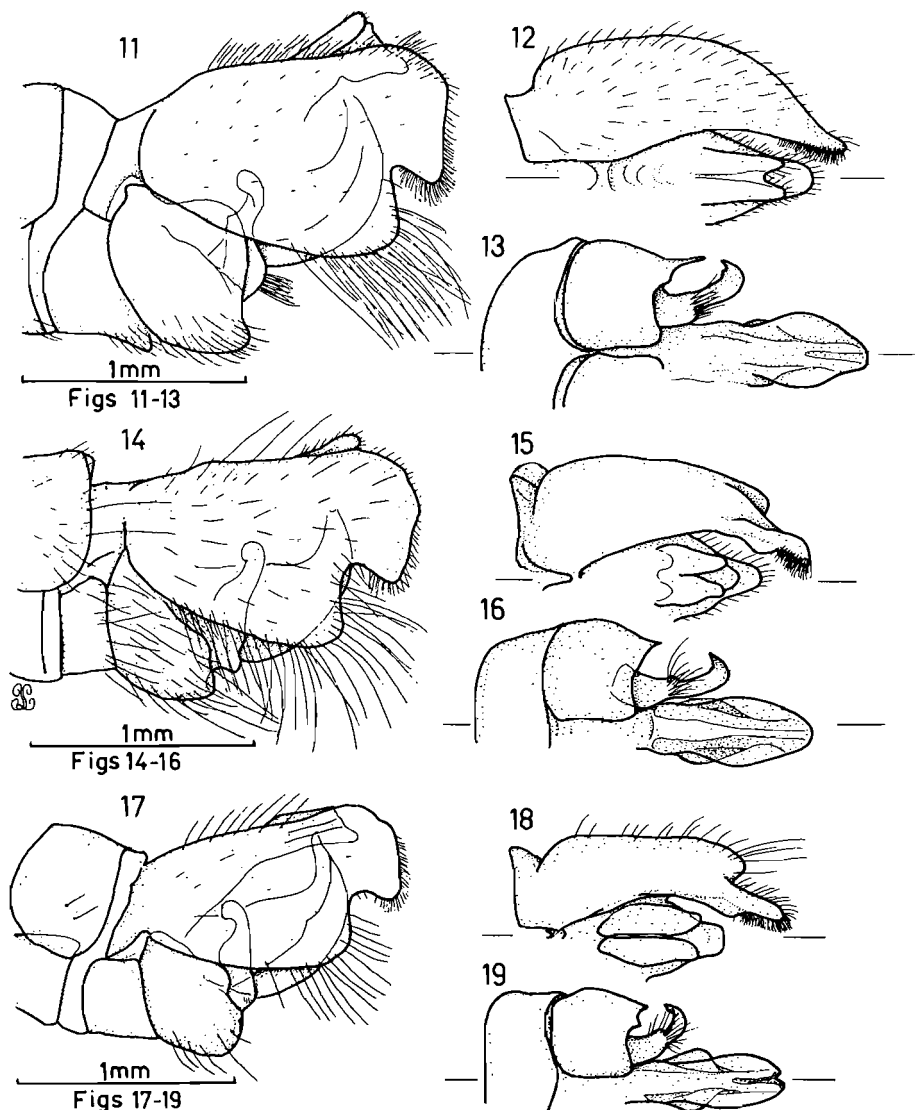
Redescription: Based on the lectotype male.

Head: Antennae black; setae black. Eye:face ratio 1:0.23; eye:lower facial margin ratio 7.2:1. Mystax black (few white setae centrally in upper half). Occipital setae: upper—long black; central—black; lower—longish white.

Thorax: ktg s and mtanepst s black (1–2 brown) Mesonotal setae: acr not evident; dc black, ca 8 pairs, go anterior of suture and do not reach hind margin of mesonotum; pprn bare; 3/3 black npl; 3/3 black spal; 2/2 black pal. Mane short black anteriorly, white posteriorly (few black setae amongst white). Scutellum with 8 black marginal bristles, disc with ca 4 black bristles and a semicircular band of white setae. Wing 9.2 × 3.1 mm; membrane transparent, without dark markings; basal angle of cell r_4 —25°. Legs with dark red-brown femora, elsewhere dark

orange-brown; cx1 with black and white setae anteriorly; cx3 with 2 black bristles laterally. Hind femur: bristles and long setae dark red-brown, short setae dark red-brown except for a narrow strip of white ones dorsally.

Abdomen: Black, fine gold-red pruinose. T3 with 2 dark red-brown marginal and 2 dark red-brown discal bristles; fine setae dark red-brown except for a few white ones laterally. S3 with *ca* 15 dark red-brown bristles and black and white setae. ♂ genitalia as in Figs 11–13; epandrium with a notch in posterior margin; aedeagus stout and thick in lateral aspect; tip bulbous in ventral view.



Figs 11–19. *Neolophonotus albofasciatus* (Ricardo, 1900) ♂ genitalia. 11–13. Lectotype. 11. Lateral. 12. Dorsal. 13. Ventral. 14–16. Lectotype of *nigricans*. 14. Lateral. 15. Dorsal. 16. Ventral. 17–19. Holotype of *transvaalensis*. 17. Lateral. 18. Dorsal. 19. Ventral.

Lectotype designation: Ricardo lists 2♂ types from Pretoria without designating a holotype. I found only one of these males in the BM and designate it as the lectotype. Ricardo did not designate a holotype for *nigricans*; I therefore designate the BM ♂ as lectotype and the ♀ as paralectotype.

Variation: Individuals of this species vary in the number and colour of bristles and setae. Females have a whiter mystax.

Synonymy: I have examined Ricardo's types of both *transvaalensis* and *nigricans* and find that they are conspecific with *albofasciatus*. The male genitalia of *nigricans* (Figs 14–16) and *transvaalensis* (Figs 17–19) are illustrated for comparison.

Material examined: SOUTH AFRICA: *Transvaal*: 1♂ (lectotype), Pretoria (2528CA), WDD, Distant Coll 1911–283 (BM); 1♂ (lectotype—*transvaalensis*), Bloksberg (= Boksberg), Johannesburg (2628AA), C. H. Pead, 1907–250 (BM); 1♂ 1♀ (lectotype & paralectotype—*nigricans*), Piet Retief (2730BB), 23.vii.1903, Capt. R. Crawshay, 4100 ft (BM); *Natal*: 3♂ 3♀, Estcourt (2929BB), ix–x.1896, Marshall, 1903–17 (BM); 1♂, Spioenkop Nat. Res. (2829CB), 3–6.x.1981, Londt (NM). *Cape Province*: 1♂, Kimb. (Kimberley—2824DB), 9/96 (ix.1896) (BM); 7♀, 9 km SW Willowmore (3323AD), 30–31.x.1978, Londt & Miller, open karoo scrub (NM); 1♂, 1 km NE Uniondale (3323CA), 31.x.1978, Miller & Londt, rocky hillside scrub (NM); 4♂ 8♀, 7 km N Steytlerville, Groot River (3324AB), 30.x.1978, Londt & Miller, river bank & field (NM); 2♀, 5 mi SEE Oudtshoorn (3322CA) Klipriver farm, 11–13.xi.1972, Van Reenen & Mathabathe (NM); 2♂ 8♀, Willowmore (3323AD), Brauns (NM); 2♀ 1?, Willowmore, 5.xi.1906 10.x.1919 12.x.1920, Brauns (NM); 1♂ 1♀, Willowmore, Brauns (ZSM); 1♂, Willowmore, Modderfontein, 15.x.1921, Brauns (NM); 2♂ 2♀, 10 km SE Vanrhynsdorp (3118DA), 14.x.1977, Miller, along river, Malaise trap (1♂) (NM); 1♂, Hopetown (2924CA) Nelspoort, 19.ix.1946, Van Son (NM); 3♂ 2♀, 16 km E Fraserburg (3121DC), 23.ix.1977, Miller, 1000' (NM); 1♂, 5 mi E Calitzdorp (3321DA), 31.xi.1972 (?), Van Reenen & Mathabathe (NM); 1♂, Kakamas (2820DC), 7.viii.1947, Louw (NM); 1♂, Rosemead (3125AC), 18.x.1925, Hutton, Ac.P 3491 (NM); 4♂ 3♀, 33 km W Calvinia, Soetwater R. (3119AD), 2.x.1977, Miller (NM); 1♂ 3♀, nr. Fullarton Station, Groot River (3323BB), 30.x.1978, Miller & Londt, river bank (NM); 7♂ 4♀, 12 km W Soutfontein (3017DA), 4.ix.1981, Londt, Schoeman & Stuckenberg, Succulent Karoo (NM); 1♂, 35 km N Vanrhynsdorp (3118BA), 4.ix.1981, Londt, Schoeman & Stuckenberg, Succulent Karoo (NM); 1♂, 8 km SE Merweville (3221DA), 7.ix.1981, Londt, Schoeman & Stuckenberg, Karroid Broken Veld (NM); 1♂ 2♀, 5 km NW Merweville (3221CB), 7.ix.1981, Londt, Schoeman & Stuckenberg, Karroid Broken Veld (NM); 1♀, 8 km N Prince Albert Road (3221DC), 7.ix.1981, Londt, Schoeman & Stuckenberg, open area (NM); 4♂ 11♀, 9 km SW Willowmore (3323AD), 30–31.x.1978, Londt & Miller, open Karoo scrub (NM); 2♂ 2♀, Willowmore, 5 & 6.x.1971, Gess (AM); 1♂ 1♀, Upington (2821AC), 9.ix.1983, Londt & Stuckenberg, banks of Orange River (NM); 2♂ 1♀, 50 km E Carnarvon (3022CD), 16.ix.1982, Schoeman (NM); 1♀, 30 km E Upington (2821AD), 6.ix.1982, Schoeman (NM); 1♀, 10 km E Kakamas (2820DA), 6.ix.1982, Schoeman (NM); 8♂ 10♀, Dikbome Merweville (3022AB) Koups, x.1952, Mus Expd (SAM); 1♂ 4♀ 1?. 7 m S Loeriesfontein (3019CD), ix.1961, SAM (SAM); 7♂ 9♀, Swart Doring

R. Namaqualand (3018CA), 2–3.x.1966, SAM (SAM); 2♂ 3♀, Victoria West (3123AC), 14.x.1966, SAM (SAM); 14♂ 10♀, Touws R. (3320AC), 16.x.1966, SAM (SAM); 12♂ 11♀, 18 m E Touws R. to Hondewater, xii.1962, SAM (SAM); 1♂, Bloutoring (3320AD) Sra. (30 m E Touws R.), xii.1962, SAM (SAM); 1♂, Burghersdorp (3026CD), 1884 (SAM); 4♂ 6♀, Moordenaars Karoo, Lammerfontein (3220DD), x.1952, Mus Expd (SAM); 13♂ 6♀ 2?, Olifantsriver, between Klaver & Clanwilliam (3218BB) (SAM); 2♂, Kuruman (2723AD) Griqualand West, x.1939, Mus staff (SAM); 5♂ 1♀, Jackalsfontein, Colesburg Dist. (3025CA), x.1935, Mus staff (SAM); 9♂ 8♀, Uniondale District (3323CA), x.1952, Mus Expd (SAM); 2♂ 4♀, Albert Dist. bet. Burghersdorp & Nootgedacht (3026CA), x.1935, Mus staff (SAM); 1♂, Mynaards Kraal, Letjiesbosch (3222CB), x.1941, Mus staff (SAM); 1♂, Touws River betw. Ladismith & Montague (3321AC), x.1937 (SAM); 1♂, Murraysburg (3123DD), xi.1935, Museum staff (SAM); 2♂, Putsonderwater (2921BB), x.1939, Mus staff (SAM); 1♂ 2♀, Meiringspoort (3322BC), 23.x.1938, Mus staff (SAM); 1♂, 8m NE Touws R. (3320AC), xii.1962, SAM (SAM); 6♂ 8♀ 1?, Augusfontein (Calvinia—3119BD); ix.1947, Mus Exp (SAM); 2♂ 1♀, Lammerskraal, Prince Albert Distr. (3322AA), ix.1947, Mus Exp (SAM); 2♂, Btw Kamieskroon & Springbok, Namaqualand (2917DD), x.1939, Mus staff (SAM); 2♂ 1?, Colesberg (3025CA), x.1935, Mus staff (SAM); 1♂ 1♀, same data but ix.1939 (SAM); 11♂ 21♀, same data but xi.1939 (SAM); 1♂, Patiente (3324DD), Humansdorp, x.1938, Mus staff (SAM); 1♂, Steytlerville (3324AD), x.1938, Mus staff (SAM); 3♂ 1♀, Verkeerde Vlei (3022AC), x.1939 (SAM); 7♂ 5♀, Buffels River (3320BB), Ladismith Div., x.1938 (SAM); 1♂, Schoemanspoort (3322AC), x.1938, Mus staff (SAM); 2♂, Oudtshoorn (3322CA), 29.x.1949, Malkin (CAS); 3♂ 2♀, Middelburg Div. (3125AC), xi.1935, Mus. Staff (SAM); 1♂ 3♀, Koup Siding (3321AB), xi.1939, Mus. Staff (SAM); 1♂ 4♀, Murraysburg (3123DD), xi.1935, SAM (SAM); 1♂, Matjiesfontein (3222AB), ix.1896 (SAM); 1♂, Willowmore (3323AD), Brauns (SAM); 1♀, Willowmore, 25.xii.1917, Brauns (SAM); 4♂ 1♀, Melton Wold (3122BD) Nieuweveld, x.1935, Mus. Staff (SAM); 1♂ 4♀, Steynsburg Div. (3125BD), x.1935, Mus. Staff (SAM); 3♂ 3♀, Steytlerville (3324AD), x.1938, Mus. Staff (SAM); 6♂ 6♀, Richmond Div. (3123BD), xi.1939, Mus. Staff (SAM); 2♂ 2♀, Albert Dist. Burghersdorp (3026CD), x.1935, Mus. Staff (SAM); 1♂, Laingsburg Dist. (3320BB), x.1964, Pretorius (SAM); 3♂, Mountain Zebra National Park (3225AD), 17–21.xii.1985, Londt, bushveld vegetation (NM). *Orange Free State*: 8♂ 18♀, Caledon R. bet. Bethulie–Aliwal North (3026AC), x.1935, Mus Staff (SAM); 1♂, Modder Riv, Brandfort Dist (2826CD), xi.1939, Mus Staff (SAM). *BOTSWANA*: 2♂ 6♀, Mboma Island, Moremi, 23°17'E:19°11'S, 16.ix.1977, Russell-Smith, short *Sporobolus* grassland, swept (NM); 2♀, same data, 13.ix.1977, on tall *Hyperrhaenia* grassland (NM); 1♂ 1♀, same data, 19.ix.1977, in cop. *Hyperrhaenia* grassland (NM); 2♀, Boro River, KB347, 23°15'E:19°44'S, 5.x.1977, Russell-Smith, grazed *Sporobolus* grassland (NM); 1♀, nr. Mboma lagoon, Moremi Reserve 23°17'E:19°11'S, 9.ix.1977, Russell-Smith, on track in *Hyperrhaenia* grassland (NM); 2♂, Maun (1923CD), 4.viii.1978, Russell-Smith, Mopane woodland & scrub (NM).

Distribution: A species with a wide range summarised in Table 1.

Prey records: Diptera—Bombyliidae (2), Hymenoptera—Apidae (1).

Neolophonotus albovittatus (Schiner, 1867) **stat. rev.**

Figs 20–22

Lophonotus albovittatus Schiner, 1867: 403–4.*Dysmachus albovittatus*; Kertész, 1909: 274.

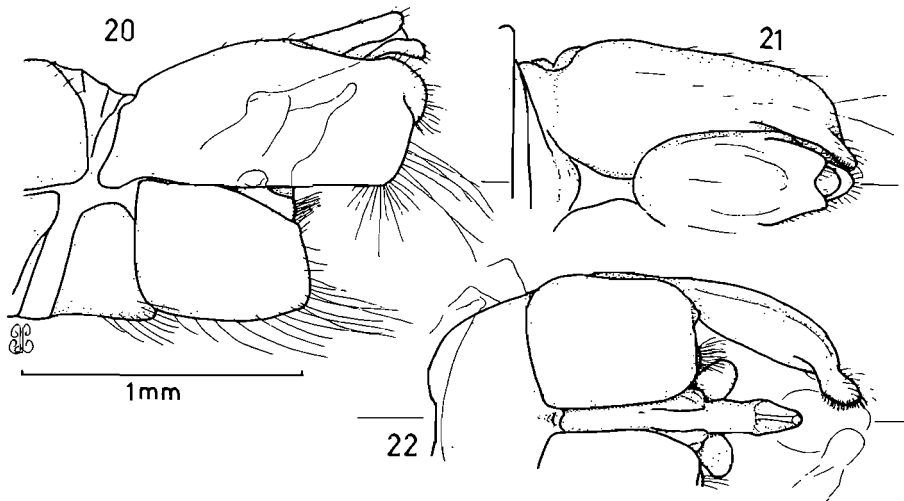
Redescription: Based on the unique holotype male.

Head: Scape and pedicel dark red-brown (flagellum broken off); setae dark red-brown and yellow. Eye:face ratio 1:0,22; eye:lower facial margin ratio 8,0:1. Mystax pale yellow. Occipital setae: upper—long dark red-brown; central—pale yellow; lower—pale yellow white.

Thorax: ktg s yellow (a few yellow); mtanepst s yellow. Mesonotal setae: acr black, anterior of suture; dc ca 6 black, go anterior of suture; pprn bare; 3/3 npl (2 yellow, 1 black); 2/2 black spal; 2/2 black pal. Mane short dark red-brown anteriorly (bordered by short white setae), white posteriorly. Scutellum with 4 yellow marginal bristles, disc with 4 yellow bristles and white setae. Wing 5,8 × 1,9 mm; membrane transparent and without obvious markings; basal angle of cell r_4 —27°. Legs: Femora dark red-brown with proximal and distal apices orange-brown, tibiae and tarsi orange-brown; cx1 with pale yellow-white setae anteriorly; cx3 with 3 pale yellow bristles laterally. Hind femur with all bristles pale yellow, long setae white (few dark red-brown ventrally), short setae yellow-white.

Abdomen: Dark red-brown, fine gold pruinose. T3 with 3 yellow marginal and 1–2 yellow discal bristles; fine setae yellow except for a few black ones dorsally on hind margin. S3 with ca 6 yellow bristles and white setae. ♂ genitalia as in Figs 20–22; aedeagus with a dorsoventrally flattened, pointed tip; aedeagus with a pair of basal lobes (in ventral aspect).

Material examined: SOUTH AFRICA: *Cape Province*: 1♂ (holotype), 'Cap', 'albovittatus Coll. Winthem' (NMW).



Figs 20–22. *Neolophonotus albovittatus* (Schiner, 1867) holotype ♂ genitalia. 20. Lateral. 21. Dorsal. 22. Ventral.

Remarks: Engel (1927) synonymised *albovittatus* with *pulcher* Loew, 1858, and this synonymy was accepted by subsequent workers including Hull (1962) and Oldroyd (1981). I have studied all the relevant material and can state without hesitation that these two species are not the same (*pulcher* is in fact a synonym of *micropterus* Macquart, also dealt with in this paper).

***Neolophonotus bamptoni* sp. n.**

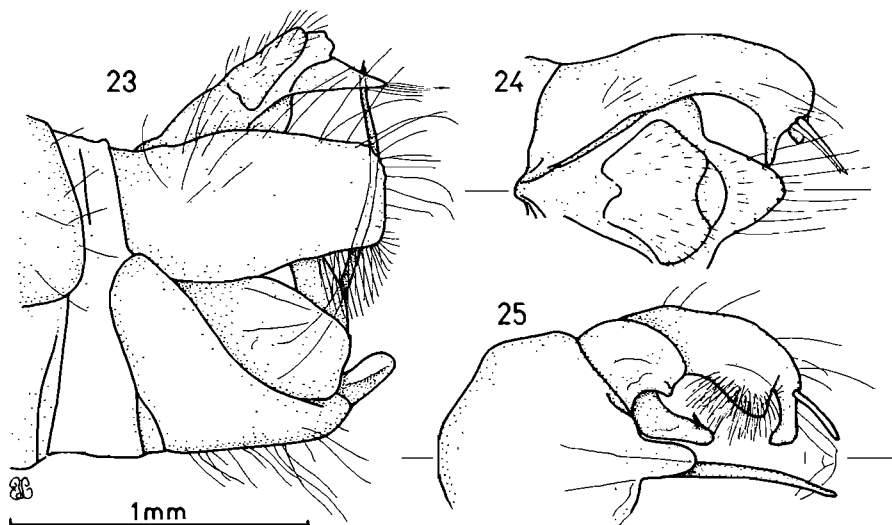
Figs 23–25

Etymology: Named for the collector, Mr Ian Bampton.

Description: Based on the holotype male.

Head: Scape and pedicel brown-yellow, flagellum brown; scape with dark red-brown bristles ventrally and white setae both dorsally and ventrally, pedicel bare dorsally and with 2 dark red-brown bristles ventrally. Eye: face ratio 1:0,36; eye: lower facial margin ratio 11,2:1. Mystax dark red-brown and white (mostly dark red-brown in lower part and mixed in upper part). Occipital setae: upper—black; central—black; lower—white.

Thorax: ktg s white; mtanepst s white (1 black). Mesonotal setae: acr long dark red-brown, anterior of suture; dc ca 8 pairs black, go well anterior of suture; pprn bare; 2/2 black npl; 2/2 black spal; 1/1 black pal. Mane short dark red-brown anteriorly, white posteriorly. Scutellum with 4 black marginal bristles, disc with white setae only (no bristles). Wing $5,6 \times 1,9$ mm; membrane transparent and without obvious markings; basal angle of cell r_4 —45°. Legs: Femora dark red-brown, tibiae and tarsi orange-brown, cx1 with white setae anteriorly; cx3 with 3–4 white bristles laterally. Hind femur with bristles dark red-brown, long and short setae white and dark red-brown.



Figs 23–25. *Neolophonotus bamptoni* sp. n. paratype ♂ genitalia. 23. Lateral. 24. Dorsal. 25. Ventral.

Abdomen: Dark red-brown, silver pruinose. T3 with 3 white marginal and 1–2 white discal bristles; fine setae longish white. S3 with *ca* 8 red-brown bristles and white setae. ♂ genitalia as in Figs 23–25 (paratype illustrated); epandrium appearing truncated in lateral view, with an internally directed process distally; hypandrium with a median, upwardly directed process; aedeagus filamentose and directed upwards.

Material examined: KENYA: 2♂ (holotype & paratype), Mt. Kulal 2°43'N:35°56'E, 2.vi.1976, Ian Bampton, ex Malaise trap (NM). NM Type No. 3344. I have also seen 1♀ (no type status) from Mt. Kenya, ii.1912, Alluaud & Jeannel, 1800 m (ZSM) which may prove to belong to this species.

Distribution: Known only from Kenya.

Remarks: *N. bamptoni* resembles *maculipennis*, *vansoni*, *bromleyi* and *salina*.

Neolophonotus brevipennis (Macquart, 1838) **stat. n.**

Figs 26–32

Lophonotus brevipennis Macquart, 1838: 130.

Lophonotus elachipterus Loew, 1858: 339; Loew, 1860: 163–4.

Dysmachus brevipennis; Kertész, 1909: 275.

Megadrillus brevipennis; Ricardo, 1920: 443–4; Hull, 1962: 524; Hull, 1967: 262; Oldroyd, 1981: 339.

Neolophonotus (*Megadrillus*) *brevipennis*; Engel, 1927: 168–9.

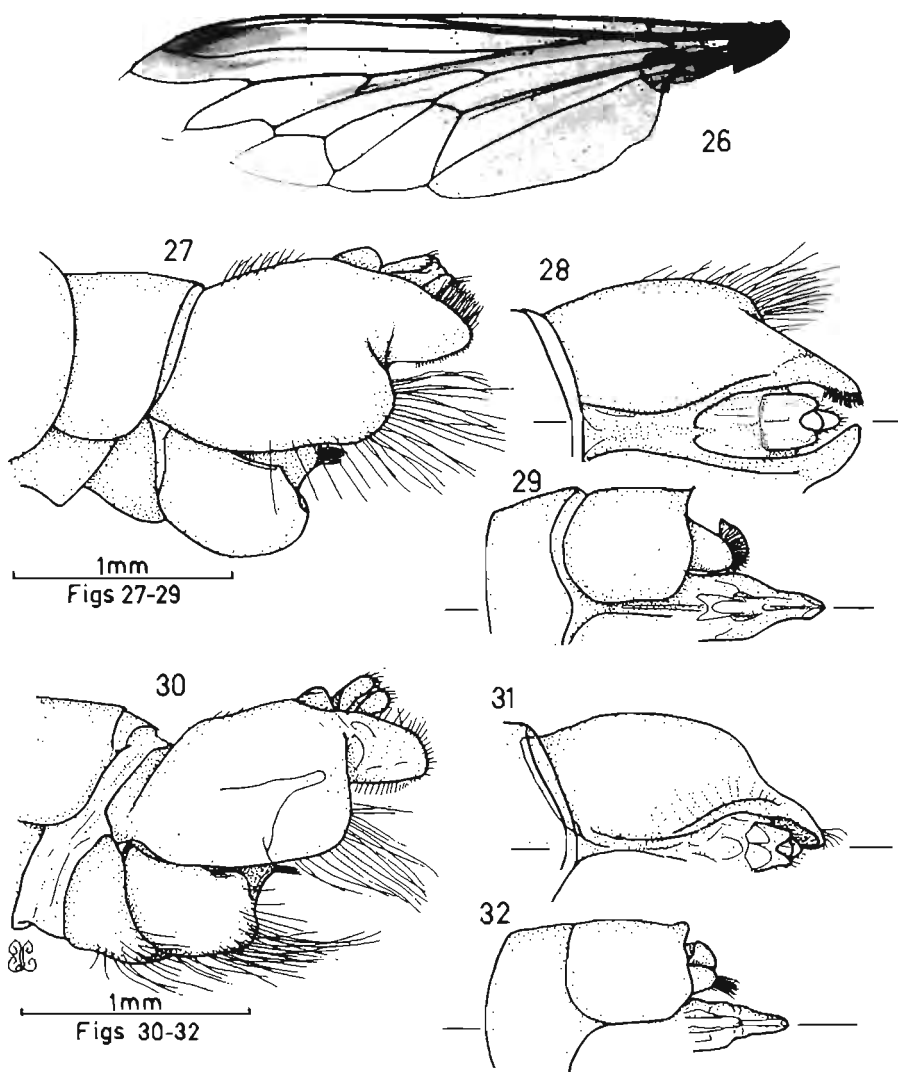
Redescription: Based on the holotype male (in poor condition).

Head: Antennae black; setae black. Eye:face ratio 1:0,25; eye:lower facial margin ratio 5,8:1. Mystax white (few black on lateral aspects of lower facial margin). Occipital setae: upper—long black; central—dark red-brown and white; lower—white.

Thorax: ktg s white (1 black); mtanepst s white. Mesonotal setae: acr not evident; dc *ca* 6 black, go anterior of suture; pprn bare; 3/4 black npl; 2/2 black spal; 2/2 black pal. Mane short black anteriorly, white posteriorly. Scutellum with 2 black marginal bristles, disc with white setae (no bristles evident). Wing 7,0 × 2,2 mm; membrane transparent, with shaded area where R₁₊₂ joins the wing margin; r₅ cell closed (Fig. 26 ♂ type of *elachipterus* illustrated); basal angle of cell r₄—41°. Legs dark red-brown with proximal apices of tibiae slightly paler; cx1 with white setae anteriorly; cx3 with 1–2 white bristles laterally. Hind femur with bristles black (few), long setae black and white, short setae white.

Abdomen: Dark red-brown, fine gold pruinose. T3 apparently lacking bristles (are some dark red-brown and white marginals on other segments); fine setae white except for a few black ones dorsally. S3 with dark red-brown bristles and longish dark red-brown and white setae. ♂ genitalia as in Figs 27–29; epandrium with a bilobed appearance in lateral view, upper lobe longer than lower and with a group of stout upwardly directed setae at the tip; gonocoxite with a similar group of setae directed posteriorly; aedeagus stout, pointed apically.

Material examined: 1♂ (holotype), '627' (MNP). SOUTH AFRICA: *Cape Province*: 1♂ (lectotype—*elachipterus*), Cap B Spei, Victorin, 10228, Coll. H. Loew (ZMB); 1♀ (paralectotype—*elachipterus*), Cap B Spei, Victorin, 19, 304,



Figs 26–32. *Neolophonotus brevipennis* (Macquart, 1838). 26. Wing of ♂ lectotype of *elachipterus*. 27–29. Holotype ♂ genitalia. 27. Lateral. 28. Dorsal. 29. Ventral. 30–32. ♂ genitalia of *elachipterus* lectotype. 30. Lateral. 31. Dorsal. 32. Ventral.

385/80 (pink) (NRS); 15♂ 13♀ 6?, Stellenbosch (3318DD), 15.x.1916 1.xii.1924 25.ix. 25.xi. 3.xii.1925 10, 12, 14, 15, 16, 18, 21, 27, 30.x. 4, 5, 9, 12, 27.xi.1926, Brauns (NM); 1♂, Stellenbosch, 27.xi.1943, le Roux (NM); 6♂ 4♀, Stellenbosch, 3.xi.1923 ix.1927 27.xii.1928 1.i. 20.x.1929 25.x.1937 3.viii.1938 17.vii.1939 13.vii.1941, Ac US (NM); 1♂ 3♀, Jonkershoek (3318DD), 16.i.1980 11, 13.xii.1979, Giliomee (NM); 1♂, Tafelberg (Table Mtn—3318CD), 15.x.1916, Brauns (NM); 1♂, Cape Town, Table Mtn (3318CD), 29.ix.1979, Londt, stony slopes above Camps Bay (NM); 1♂, Frenchhoek (3319CC), 6.xii.1926, Brauns

(NM); 2♂, Knysna Heads (N side) (3423AA), 9–10.xii.1979, Londt & Stuckenberg, open hillside grass (NM); 1♂, Knysna, i.1979, Van Tonder & Kok (NCI); 1♂ 1♀, 32 km NE Clanwilliam, Brandewyn R. (3219AA), 2–3.x.1977, Miller, Malaise trap (NM); 1♂, George (3322CD), 17–25.xii.1968, Strydom (NM); 1♂, Brenton on Sea (3432AA), 10.xii.1979, Londt & Stuckenberg, dune & hillside vegetation (NM); 1♂, Onrust River nr Hermanus (3419AC), 30.xi.1974, Whitehead (SAM); 6♂ 4♀, Cold Bokkeveld, Ceres Dist (3319AD), 13–30.x.1934, Versfeld (SAM); 2♀ 4♀ 2?, Citrusdal Dist (3219CA), xi.1948, Mus Exp (SAM); 7♂ 5♀, Olifants River bet Citrusdal & Clanwilliam (3218DB), x–xi.1931, Museum Staff (SAM); 1♂ 5♀ 2?, Wit River Valley, Bains Kloof (3319CA), xii.1949, Mus Exp (SAM); 1♂, R. Sonder End, Oudebosch (3419DB), xi–xii.1928, Barnard, 1500 ft (SAM); 4♂, Knysna Dist (3423AA), xi.1938, Mus staff (SAM); 1♂, Saldanha Bay (3317BB), ix.1960, SAM (SAM); 1♂, Constable (2523CD), ii.1958 (SAM); 2♂, Ceres Div, Matroosberg (3319BC), xi.1917, Lightfoot, 3500 ft (SAM); 1♂ 2♀, Het Kruis (3218DA), x.1947, Mus Exp (SAM); 1♂ 2♀, East of Pakhuis Pass (3219AA), ix.1947, Mus Exp (SAM); 1♂, Zuur Vlake, Wellington (3318DB), xi.1922, Barnard, 3000 ft (SAM); 1♂ 1♀, Mossel Bay (3422AA), xi.1939, Turner (SAM); 30♂ 43♀ 6?, Upper Sources Olifants River, Ceres (3319AD), xii.1949, Mus Exp (SAM); 7♂ 3♀ 1?, Goedehoop, Heidelberg Dist. (3420BB), x.1951, Mus. Expd. (SAM); 1♀, Oudtshoorn, Zebra (3322CB), x.1951, Mus. Expd. (SAM).

Distribution: Recorded from five climatic regions (Table 1) centred on the South-western Cape Province.

Remarks and lectotype designation: I have studied the relevant types and confirm that *elachipterus* is a synonym of *brevipennis*. I have seen two specimens, identified as *elachipterus*, which may be Loew's entire series. I consider these to be syntypes as Loew did not designate a holotype. I hereby designate the male in the ZMB as lectotype and the female in the NRS as paralectotype. Illustrations of the lectotype genitalia (Figs 30–32) are provided for comparison with the *brevipennis* holotype.

Synonymy of *Megadrillus*: As pointed out in the first part of this series, I do not consider the closed r_5 cell to be a reliable generic or even subgeneric character. Those species possessing this feature are closely related to other members of the *pellitus* species-group as I have defined it.

***Neolophonotus bromleyi* sp. n.**

Figs 33–35

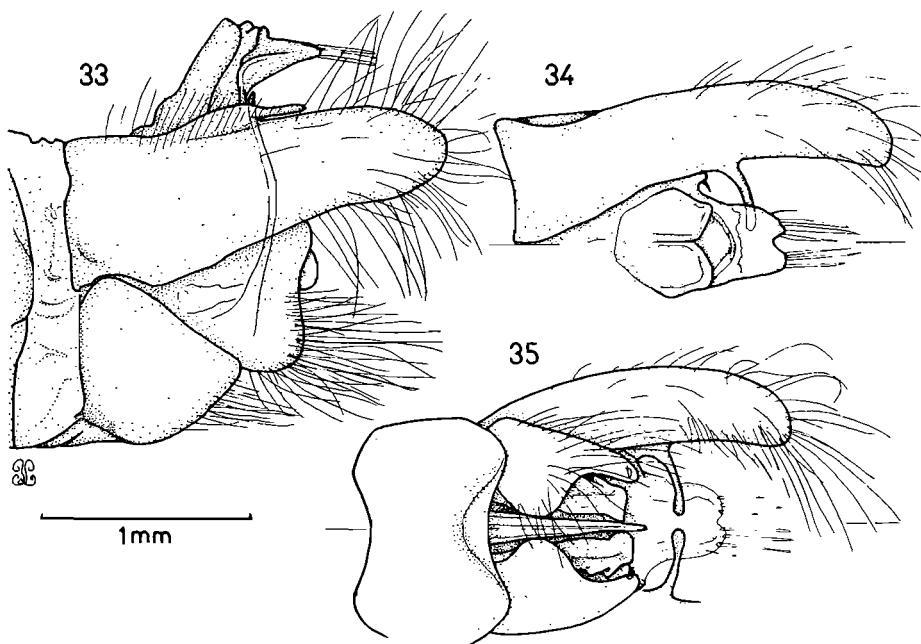
Etymology: Named after Dr S. W. Bromley in recognition of his contribution to knowledge of Asilidae.

Description: Based on the holotype male.

Head: Scape orange-brown, pedicel orange, flagellum dark red-brown with orange base; scape with white setae dorsally, dark red-brown and white setae ventrally, pedicel similar but with no white setae ventrally. Eye:face ratio 1:0.21; eye:lower facial margin ratio 9.0:1. Mystax cream, mixed with black setae in upper part and laterally on lower facial margin. Occipital setae: upper—black and yellow; central—pale yellow; lower—white.

Thorax: ktg s and mtanepst s orange and white. Mesonotal setae: acr black, anterior of suture; dc ca 6 pairs black; pprn bare; 3/3 orange npl; 2/2 black spal; 1/1 black pal. Mane short dark red-brown anteriorly (small white setae bordering), white posteriorly. Scutellum with 4 black marginal bristles, disc with 4 black bristles and a few white setae. Wing 8.4×3.1 mm; membrane transparent and without any obvious markings; basal angle of cell r_4 — 44° . Legs: Femora dark red-brown with distal tips orange-brown, tibiae and tarsi orange-brown; cx1 with white setae anteriorly; cx3 with 3 white bristles laterally. Hind femur with bristles white and black, long and short setae black and white.

Abdomen: Dark red-brown, gold pruinose. T3 with 3 white marginal and 3 white discal bristles; fine setae short white laterally and black dorsally. S3 with 6 white bristles and short white setae. ♂ genitalia as in Figs 33–35 (paratype illustrated); epandrium elongate in lateral view, with an internally directed process at about midlength; hypandrium appearing truncated in lateral aspect; aedeagus filamentose and directed upwards; hypoproct with long bristles.



Figs 33–35. *Neolophonotus bromleyi* sp. n. paratype ♂ genitalia. 33. Lateral. 34. Dorsal. 35. Ventral.

Paratypes: 16♂ 25♀ 3?, agree well with holotype.

Material examined: NAMIBIA: 13♂ 18♀ 3? (holotype & paratypes), Andara (SE1821Ab), Kavango, 20–25.viii.1971, H3328 (SMW, NM). BOTSWANA. 1♂ (paratype), Mboma Island, Moremi Reserve, $23^\circ 17' \text{E}: 19^\circ 11' \text{S}$, ix.1977, A. Russell-Smith, in thin *A. nigrescens* woodland & *Hyperrhaenia* grassland (NM); 1♀ (paratype), nr Mboma Lagoon, Moremi Reserve, $23^\circ 17' \text{E}: 19^\circ 11' \text{S}$, 9.ix.1977, A. Russell-Smith, on track in *Hyperrhaenia* grassland (NM). ANGOLA: 1♂ 2♀

(paratypes), District de Huilla, Lomba (0614BA or 0814BB), Mission Rohan-Chabot, 1914 (MNP). MOZAMBIQUE: 1♂ 3♀ (paratypes), Zambeze, Nova Choupanga pres Chemba (1734BB), 1929, P. Lesne (MNP), ZIMBABWE: 1♂ 1♀ (paratypes), Salisbury (= Harare 1731CC), v.1917, R. W. Tucker (SAM). SMW Type No. T698, NM Type No. 3345, SAM Type No. 5001.

Distribution: Recorded from the Botswana and N Namibian climatic region of southern Africa and from Angola, Zimbabwe and Mozambique.

Remarks: *N. bromleyi* belongs to a subgroup of the *pellitus* species-group which presently includes four other species—*maculipennis*, *vansoni*, *bamptoni* and *salina*. All five species have clear similarities in male genital structure.

***Neolophonotus coronatus* sp. n.**

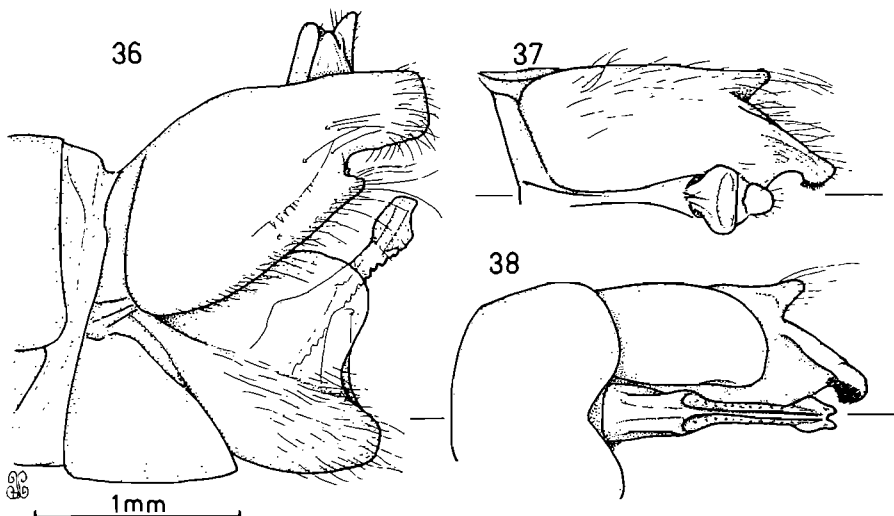
Figs 36–38

Etymology: *L. corona*—crown. Refers to the crown of yellow occipital setae.

Description: Based on the holotype male.

Head: Antennae dark red-brown to black; setae black and white (no white on ventral aspect of pedicel). Eye:face ratio 1:0,21; eye:lower facial margin ratio 6,8:1. Mystax black and white in upper and central parts, pale orange and black on lower facial margin. Occipital setae: upper—yellow (few black laterally); central—pale yellow; lower—white.

Thorax: ktg s and mtanepst s strong yellow and weak white. Mesonotal setae: acr black, anterior of suture; dc ca 8 pairs black; pprn bare; 3/3 yellow npl; 2/2 yellow spal; 2/2 yellow (plus 1 small black setae on left side) pal. Mane short black anteriorly (small white setae bordering), white posteriorly. Scutellum with 7 yellow marginal bristles, disc with 5 yellow bristles and white setae. Wing 10,1 × 3,5 mm;



Figs 36–38. *Neolophonotus coronatus* sp. n. paratype ♂ genitalia. 36. Lateral. 37. Dorsal. 38. Ventral.

membrane transparent and without obvious markings; basal angle of cell r_4 —24°. Legs: black; cx_1 with white setae anteriorly; cx_3 with 1 white bristle laterally. Hind femur with white bristles, long and short setae black (ventrally) and white (dorsally).

Abdomen: Black, silver pruinose. T3 with 3–4 white marginal and *ca* 7 white discal bristles; fine setae short white except for a few black dorsally. S3 with 6 white bristles and white setae. ♂ genitalia as in Figs 36–38 (paratypes illustrated); epandrium elongate and with a subapical, ventral lobe in lateral view, which juts outwards when viewed dorsally or ventrally; gonocoxite with a well-developed, semitransparent flange on dorsal aspect; aedeagus fairly stout and directed upwards, bearing rows of spine-like processes ventrally.

Paratypes: 5♂ 6♀, agree well with holotype, except that females differ as follows: mystax completely white; antennae with few black setae; no black setae on occiput; all femoral setae and bristles white; all but 2 dc setae yellow; no marginal bristles on terga posterior of T3.

Material examined: NAMIBIA: 6♂ 6♀ (holotype & paratypes), 10 km W Aus (2616CA), 30.viii.1983, Londt & Stuckenberg, sparse grassveld—small woody plants (NM). NM Type No. 3346.

Distribution: Known only from the type-locality in the Desert and Poor Steppe climatic region.

Prey record: Diptera: Asilidae—*Gonioscelis* sp. (1).

***Neolophonotus efflatouni* sp. n.**

Figs 38–41

Neolophonotus molitor, Efflatoun, 1934: 77–79 (nec. Wiedemann, 1828).

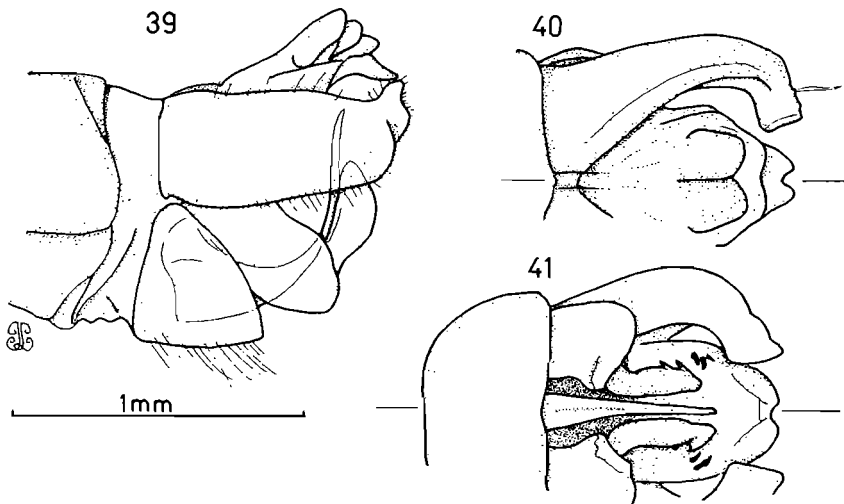
Etymology: Named after Hassan C. Efflatoun Bey whose studies on Egyptian Asilidae are highly regarded.

Description: Based on the holotype male.

Head: Antennae dark red-brown; setae of scape dark red-brown and white ventrally and dark red-brown dorsally, setae of pedicel white dorsally and dark red-brown ventrally. Eye:face ratio 1:0.21; eye:lower facial margin ratio 8,8:1. Mystax white with a few black setae centrally on lower facial margin. Occipital setae: all white.

Thorax: *ktg* s and *mtanepst* s white. Mesonotal setae: *acr* well-developed, black, anterior of suture; *dc ca* 8 pairs black, *go* well anterior of suture; *pprn* bare; 3/3 pale yellow *npl*; 2/2 black *spal*; 1/1 black or yellow *pal*. Mane short, black anteriorly (small white marginal setae), white posteriorly. Scutellum with 4 black and yellow-white marginal bristles, disc with white setae only. Wing 5,6 × 1,7 mm; membrane transparent and without markings; basal angle of cell r_4 —41°. Legs: femora dark red-brown, rest red-brown; cx_1 with white setae anteriorly; cx_3 with 2 white bristles laterally. Hind femur with all bristles and setae white.

Abdomen: Black, silver pruinose. T3 with 3 white marginal and 1 white discal bristles; fine setae white except for a few black setae middorsally on hind margin. S3 with white bristles and setae. ♂ genitalia as in Figs 39–41; epandrial lobes



Figs 39–41. *Neolophonotus efflatouni* sp. n. holotype ♂ genitalia. 39. Lateral. 40. Dorsal. 41. Ventral.

shortish and inflexed distally; gonostylus with a pair of upwardly directed, sharp processes distally; aedeagus elongate and slender.

Paratypes: 4♂, agree well with holotype.

Material examined: EGYPT: 2♂ (holotype & paratype) 2? (no type status), Wadi-Hoff (?), 15.iv.1921 10.iii.1922 16.iv.1922, Efflatoun (ZSM): 1♂ (paratype), W (Wadi) Rishrash (29°29'N:31°16'E), 3.iii.1922, Efflatoun (ZSM); 2♂ (paratypes), W Abu el Rakham (?), 10.iii.1922 (ZSM NM). NM Type No. 3347

Distribution: Egypt. According to Efflatoun (1934) the species 'is common and seems to be widely distributed in Egypt'. It was apparently 'captured in most of the Wadies East and South of Cairo and Helouan, along the Suez Road, as well as from the Western Coast, Ikingi to Hammam and Mersa Matruh'. Efflatoun also states that he found the species from the beginning of March to the end of June (information included in Table 1).

Remarks: Efflatoun provides an excellent description of this species under the name *N. molitor*. Now that I have examined some of his material I can state without doubt that the specimens belong to a species quite distinct from *molitor*. When first I saw the material I was tempted to place it under the name *N. leucotaenia* Bezzi, 1906, but after careful examination of Bezzi's description decided that the two species are probably not the same (see additional comment under *setiventris*).

***Neolophonotus ensiculus* sp. n.**

Figs 42–45

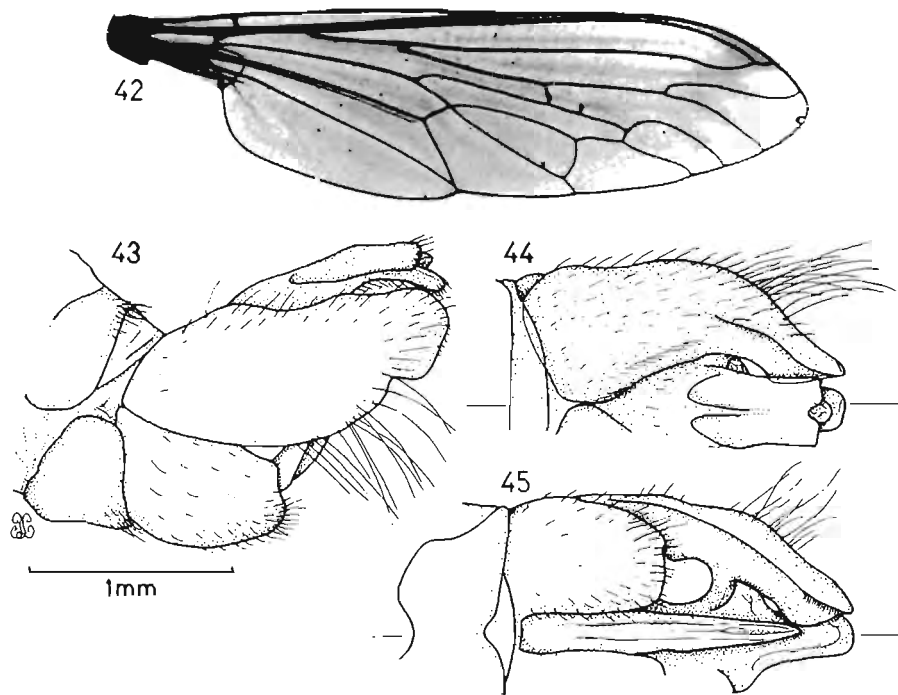
Etymology: L. *ensiculus*—a small sword. Refers to the slender, sword-like aedeagus.

Description: Based on the unique holotype male.

Head: Antennae dark red-brown, scape and pedicel slightly paler; setae black ventrally (a few yellow on scape) and yellow dorsally. Eye:face ratio 1:0,23; eye:lower facial margin ratio 6,9:1. Mystax white with black laterally, black and yellow on lower facial margin. Occipital setae: upper—black and yellow; central—yellow; lower—white.

Thorax: ktg s and mtanepst s orange. Mesonotal setae: acr weak black, anterior of suture; dc ca 7 pairs black, go anterior of suture; pprn bare; 3/3 orange npl; 3/2 black spal; 2/2 black pal. Mane short, black anteriorly (small white setae bordering), white posteriorly. Scutellum with 5 black marginal bristles, disc with 1 weak black bristle and white setae. Wing $6,9 \times 2,3$ mm; membrane transparent, with a faint subapical marking as shown in Fig. 42; basal angle of cell r_4 — 29° . Legs: dark red-brown, tibiae a little paler; cx1 with white and yellow setae anteriorly; cx3 with 1 yellow bristle laterally. Hind femur with orange bristles (one or two black), long setae yellow and dark red-brown, short setae yellow.

Abdomen: Dark red-brown, gold pruinose. T3 with 1 yellow marginal bristle (are also a few thin black marginal setae) and 2–4 black discal bristles; fine setae short black except for a few white setae laterally. S3 with ca 10 yellow bristles and yellow setae. ♂ genitalia as in Figs 43–45; epandrium elongate, with a group of setae along hind margin in lateral view; aedeagus fairly slender and sword-like.



Figs 42–45. *Neolophonotus ensiculus* sp. n. holotype ♂. 42. Wing. 43–45. ♂ genitalia. 43. Lateral. 44. Dorsal. 45. Ventral.

Material examined: SOUTH AFRICA: *Cape Province*: 1♂ (holotype), 25 km E Nieuwoudville (3113AD), 5.ix.1981, J. Londt, L. Schoeman & B. Stuckenberg, W Mountain Karoo (NM). NM Type No. 3348.

Distribution: Known only from the type-locality in the southern part of the Desert & Poor Steppe climatic region.

***Neolophonotus floccus* sp. n.**

Figs 46–49

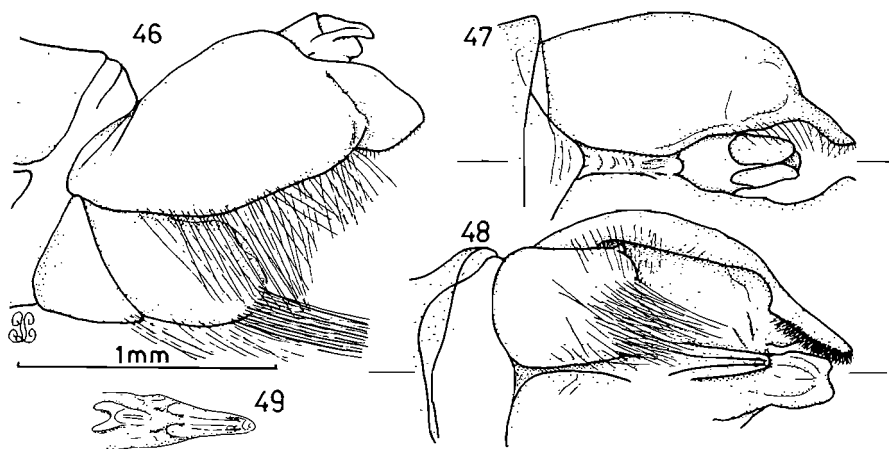
Etymology: *L. floccus*, a tuft of wool. Refers to the tuft of setae on the gonocoxite.

Description: Based on the holotype male.

Head: Antennae black; setae black (a few white on scape). Eye:face ratio 1:0,23; eye: lower facial margin ratio 9,9:1. Mystax white with a few black on lower facial margin. Occipital setae: upper and central—black; lower—white.

Thorax: ktg s white and yellow-white, mtanepst s black and white. Mesonotal setae: acr black, anterior of suture; dc ca 8 pairs black, go well anterior of suture; pprn bare; 3/3 black npl; 2/2 black spal; 2/2 black pal. Mane short black anteriorly (small white setae bordering), white posteriorly. Scutellum with 5 black marginal bristles, disc with white setae only. Wing 5,3 × 1,8 mm; membrane transparent, with grey patch where R_{1+2} meets wing margin; basal angle of cell r_4 —38°. Legs: dark red-brown; cx1 with white setae anteriorly; cx3 with 1 white bristle laterally. Hind femur with black and white bristles, long setae white, short setae white (few dark red-brown ventrally).

Abdomen: Black, silver pruinose. T3 with 1–2 white marginal bristles; fine setae white except for a few black setae middorsally on hind margin. S3 with 1 large black bristle and black and white setae. ♂ genitalia as in Figs 46–49; epandrium elongate with a group of setae along hind margin in lateral view; aedeagus fairly slender and with a pair of small bulbous processes ventrally.



Figs 46–49. *Neolophonotus floccus* sp. n. holotype ♂ genitalia. 46. Lateral. 47. Dorsal. 48. Ventral. 49. Aedeagus in ventral view.

Paratypes: 16♂ 6♀, agree well with holotype.

Material examined: SOUTH AFRICA: *Cape Province*: 1♂ (holotype), Laaiplek (3319DD); 9.x.1977, R. M. Miller, Malaise trap (NM); 9♂ 3♀ (paratypes), Ysterfontein (3218BA), ix.1960, SAM (SAM NM); 14♂ 10♀ 4? (1♂ 2♀ paratypes), Graafwater (3019CC), x.1947, Mus Exp. (SAM); 6♂ 1♀ (paratypes), Leipoldtville—Eland's Bay (3218AD), xi.1948, Mus. Exp. (SAM); 1♂, Saldanha Bay (3317BB), ix.1960 SAM (SAM); 4♂ 2?, Namaqualand, Knersvlakte (3118BC), ix.1941, Mus Staff (SAM); 2♂, Bowesdorp (Kamieskroon—3017BB), ix.1941, Mus Staff (SAM); 1♂, East of Pakhuis Pass (3218BB), ix.1947, Mus Exp (SAM). NM Type No. 3349, SAM Type No. 5002.

Distribution: Known only from the Mediterranean climatic region.

Neolophonotus gemsbock Bromley, 1936

Figs 50–59

Neolophonotus (Lophopeltis) gemsbock Bromley, 1936: 132–33.

Neolophonotus gemsbock; Oldroyd, 1981: 340.

Redescription: Based on the holotype male.

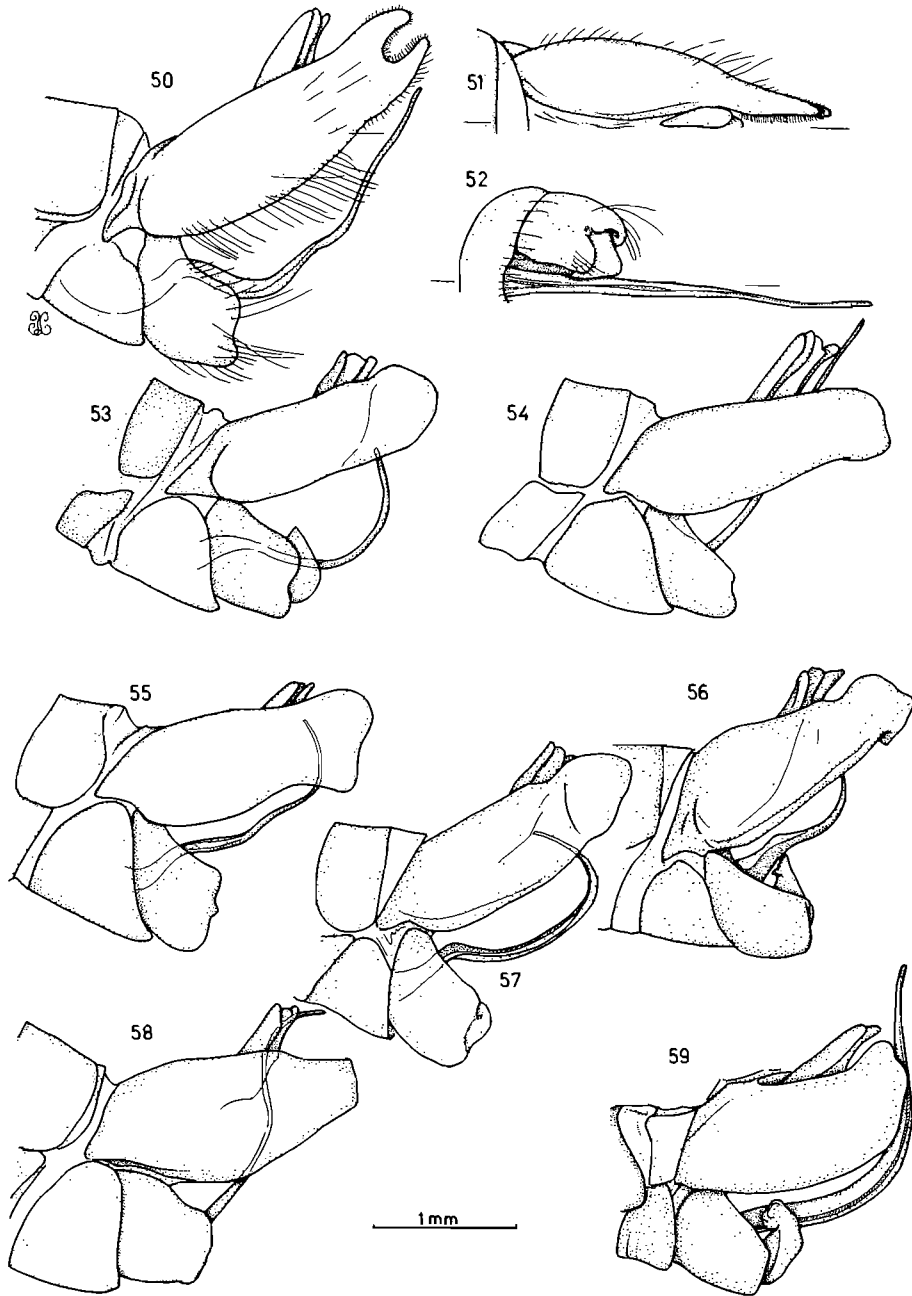
Head: Antennae dark red-brown to black; setae black and white. Eye: face ratio 1:0.23; eye:lower facial margin ratio 6.8:1. Mystax black and white mixed. Occipital setae: upper—black and white; central and lower—white.

Thorax: ktg s and mtanespt s yellow-white (bristles) and white (setae). Mesonotal setae: acr black; dc black; pprn bare; 3/3 yellow-white npl; 2/2 yellow-white and black spal; 1/1 black pal. Mane short black anteriorly (short white setae bordering), white posteriorly. Scutellum with 4 black marginal bristles, disc with 4 black bristles and three groups of white setae. Wing 8.2×2.9 mm; membrane transparent, without dark markings; basal angle of cell r_4 —38°. Legs dark red-brown, tibiae and tarsi dark brown; cx1 with white setae anteriorly; cx3 with 1 white bristle laterally. Hind femur: bristles white, long setae dark red-brown and white, short setae white.

Abdomen: Dark red-brown to black, fine silver pruinose, T3 with 2 white marginal and 2 white discal bristles; fine setae white except for a few black ones dorsally. S3 with 8 white bristles and white setae. ♂ genitalia as in Figs 50–52; epandrium elongate with a notch distally; aedeagus elongate, narrow and sinuous.

Variation: ♀ similar to ♂ but mystax whiter. This species, as presently understood, is widely distributed, and demonstrates considerable geographical variation. Male genital structure is particularly variable; an indication of the variability can be seen in Figs 53–59.

Material examined: BOTSWANA: 1♂ (holotype) 3♀ (allotype & paratypes), Tsotsorogo Pan (1824CB), 17.vi.–9.vii.1930, V.-L. Kal Exp (NM); 6♂ 1♀ (paratypes), Gemsbok Pan (?), 23.iv.–5.v.1930, V.-L. Kal Exp (NM); 1♂ 2♀ (paratypes), Maun (1923CD), 18.v.–7.vi.1930, V.-L. Kal Exp (NM) 2♀, Maun, 4.viii.1978, Russell-Smith, Mopane woodland & scrub (NM); 1♂ (paratype), Mababe Flats (?), 8–15.vi.1930, K.-L. Kal Exp (NM); 1♀ (paratype), Damara Pan (2222AB), 15–21.iv.1930, K.-L. Kal Exp (NM); 1♂, Serowe, (SE2226BD),



Figs 50–59. *Neolophonotus gemsboeck* Bromley, 1946 ♂ genitalia. 50–52. Holotype. 50. Lateral. 51. Dorsal. 52. Ventral. 53–59. Variation seen in other ♂ specimens. 53. Cradock. 54. Danielskuil. 55. Gorongoza. 56. Windhoek. 57. Mhlopheni. 58. Pretoria. 59. Kruger National Park.

13.v.1983, Forchhammer (NM); 1♂, Farmers Brigade, 5 km SE Serowe, 28.iv.1984, Forchhammer, hillside N slope, mercury vapour lamp (NM); 1♀, same data but 25.v.1984, Malaise trap (NM); 1♂, same data but 31.v.1985 (NM); 2♂ 3♀, same data but iii & iv.1986 (NM); 1♂ 1♀, Farmers Brigade area ca 6 km SE Serowe (SE2226BD), 19.iv.1983 24.v.1984, Forchhammer, *A. tortilis* woodland (NM); 1♀, Forestry Nursery, ca. 6 km SE Serowe, 19.v.1985, Forchhammer, 1300 m, Malaise trap (NM); 1♂ 1♀, Maxwee Grassland (?), viii & x.1976, Russell-Smith, pitfall (NM); 3♂ 3♀, Mahalapye (2326BB), iv.1960, Schofield (NM). ZIMBABWE: 1♂ 5♀, Bulawayo (2028BA), 18, 25.iv.1920 19.viii.1922 ix.1938, Rhodesia Museum (NMZ); 1♂ 1♀, Bulawayo, 1911, Pead (ZSM); 1♀, Bulawayo, 22.viii.1909, Chubb (DM); 1♂, Bulawayo, 1.iv.1923, Stevenson (NM); 1♀, Forestvale (1829DD), 20.viii.1922, Rhodesia Museum (NMZ); 2♀, Bindura (1731AD), v.1938, Nat Mus S Rhodesia (NMZ). SOUTH AFRICA: *Cape Province*: 1♂ 4♀, 10 km N Danielskuil (2823BA), 25.iii.1982, Londt & Schoeman, rocky slopes/shrubs (NM); 1♂, 30 miles E Kimberley (2824DB), 22.iii.1928, Munro (NM); 1♂, 16mi E Cradock, farm 'Who can tell' (3225BB), 11.iii.1972, Irwin (NM); 2♂, Willowmore (3323AD), iii.1908 iii.1916, Brauns (NM). *Transvaal*: 11♂ 10♀, Zoutpb Dist (Zoutpansberg—2229DD), 6.vii.1917, Breyer (NM); 1♀, N E Zoutp dist, vii & viii.1916, Breyer (NM); 1♂, Gravelotte (2330DC), iv.1924, Van Dam (NM); 2♂ 1♀, Bobomene K.N.P. (Kruger Nat Park), 10–16.vii.1975, Braack (NM); 2♂ 2♀, Kruger National Park, vicinity of Skukuza (SE2431DC), 9–12.iv.1985, Londt, bushveld (NM); 1♂, Vaalwater (2428AB), 2.iii.1980, Groenewald (NM); 1♂, Pretoria (2528CA), iii.1951, MN (NM); 1♂, Pretoria, Bynespoort, 18.v.1950, Munro (NCI); 3♂, Nylsvley Nat Res (2428DA), 17.v.1982, UCT Survey S. Milton, game track & road, flood plain (NM); 1♂, same locality, 11.v.1982, gravel, *Combretum* woodland (NM); 1♂, same locality, Nyl flood plain (2428AB), 11.v.1982, UCT Survey S. Milton, sand/clay road, *A. karroo* savanna (NM). *Natal*: 1♂ 3♀, 15 km SE Rorke's Drift, 28°30'S:30°30'E, 29.v.1982, Miller (NM); 5♂ 1♀, Mhlopheni Nat Res (2830CD), 8 km SE Muden, 3.iv.1983, Londt (NM); 20♂ 5♀, same locality, 8.iv.1983, Londt, Barraclough & Seymour (NM); 1♂ 1♀, same data but 11.vi.1984, Londt, mixed thornveld (NM); 1♂, Tugela Ferry (2830CB), v.1935, Bevis (DM); 9♂ 4♀, M'fongozi (2830DB), iii.–iv.1917 & iv.–v.1934, Jones (SAM); 2♂, Ubombo/Jozini turnoff (2732AC), 11.v.1981, Car (SAM); 1♂, Mkuze Reserve (2732CB), 3–11.x.1977, Londt, 300 m (NM); 1♂, Ndumu Reserve, Ingwavuma dist (2632CD), 11.v.1961, Oatley (NM); 1♂, Eshowe (2831CD), 1894, Haviland (SAM). NAMIBIA: 1♂ 1♀ 1?, Kavango, Takuasa, (SE1720Cd), 14–19.viii.1971, H2996 (SMW); 3♂ 1♀, Tsotsana, 18 km W Bushmanland, 19°04'S:20°37'E, 14–19.vi.1971, H2339 (SMW); 1♀, Barby 26, Bethanie, (SE2516Dc), 2–7.x.1972, H9191 (SMW); 5♀, Noachabeb 97, Keetmanshoop, (SE2718Ad/Bc), 22–28.iv.1972, H8025 (SMW); 2♂ 1♀, Onze Rust 192, Rehoboth, (SE2418Ad), 16–18.v.1973, H12978 (SMW); 1♂ 2♀, Vaalbank 319, Gobabis, (SE2318Dd), 19–22.v.1973, H13098 (SMW); 2♂ 2♀, Ondangua 38 km SE Ovamboland, (SE1715Dd), 9.v.1971, H2485 (SMW); 9♂ 7♀ 3?, Gautsche Pan Bushmanland, 19°48'S:20°35'E, 9–13.vi.1971, H2170 (SMW). SWAZILAND: 1♂, Lubuli (2731BB), ix.1955, Smith (DM). ANGOLA: 1♂, Namakunde (1715BB), 3.vi.1948, Koch (NM). MOZAMBIQUE: 1♂, Prov du Gorongosa, Tendo du

Sungoue (?), viii.1907, Vasse, 40 m alt (MNP); 1♂, Gazaland (2333AA), vi.1915, Breyer (NM).

Distribution: Widely distributed in southern Africa (Table 1).

Note: 2♂ 1♀ paratypes from Gemsbok Pan represent a closely related species, *N. satanus* sp. n., and are listed under that species.

Prey record: Diptera: Bombyliidae (1), Orthoptera: Acrididae—hopper (1).

***Neolophonotus haplotherates* sp. n.**

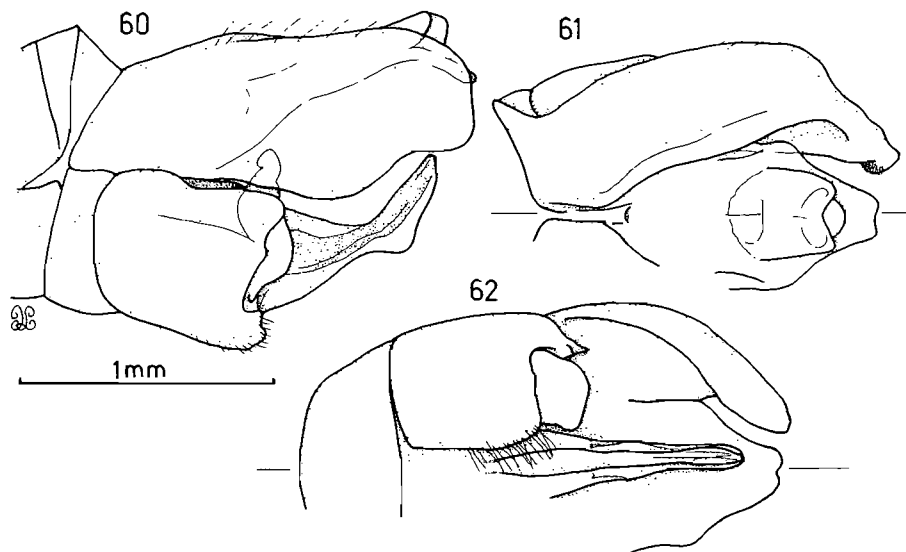
Figs 60–62

Etymology: Gr. *haplous*—single, *therates*—hunter. Refers to the unique holotype.

Description: Based on the unique holotype male.

Head: Antennae dark red-brown, base of flagellum orange; setae dark red-brown and white (no white on ventral aspect of pedicel). Eye:face ratio 1:0,22; eye:lower facial margin ratio 7,6:1. Mystax white (centrally) and red-brown (laterally and on lower facial margin). Occipital setae: upper—black and white; central and lower—white.

Thorax: ktg s and mtanepst s white (pale yellow tinge). Mesonotal setae: acr black, anterior of suture; dc ca 7 pairs black; pprn bare; 3/3 (2 yellow, 1 black) npl; 2/2 black spal; 2/2 (1 black, 1 white) pal. Mane short dark red-brown anteriorly (small white setae bordering), white posteriorly. Scutellum with 5 black marginal bristles, disc with 2 black bristles and white setae. Wing 6,9×2,1 mm; membrane transparent and without obvious markings; basal angle of cell r_4 —26°. Legs dark red-brown, tibiae and tarsi red-brown; cx1 with white setae anteriorly; cx3 with 1



Figs 60–62. *Neolophonotus haplotherates* sp. n. holotype ♂ genitalia. 60. Lateral. 61. Dorsal. 62. Ventral.

white bristle laterally. Hind femur with bristles white and dark red-brown, long setae dark red-brown, short setae white.

Abdomen: Dark red-brown, red-gold pruinose. T3 with *ca* 3 white and black marginals and *ca* 3 white discal bristles; fine setae short white except for a few black ones dorsally on hind margin. S3 with 6 white bristles and white setae. ♂ genitalia as in Figs 60–62; epandrium shortish in lateral view, with short apical setae on mesial face; hypandrium with a shallow flange dorsally (best seen in lateral view); aedeagus directed upward distally and with two subapical, ventral flanges.

Material examined: SOUTH AFRICA: *Cape Province*: 1♂ (holotype), V. Wyks Vley (Van Wyksvlei—3021BD), 1893 (SAM). SAM Type No. 5003.

Distribution: Known only from the type-locality in the Desert and Poor Steppe climatic region.

Neolophonotus heteronevrus (Macquart, 1838), **comb. n.**

Figs 63–66

Lophonotus heteronevrus Macquart, 1838: 128.

Megadrillus heteroneurus; Bigot, 1857: 545.

Megadrillus heteroneurus; Kertész, 1909: 282; Ricardo, 1920: 444; Hull, 1962: 524.

Neolophonotus (*Megadrillus*) *heteroneurus*; Engel, 1927: 168–9.

Megadrillus heteronevrus; Oldroyd, 1981: 339.

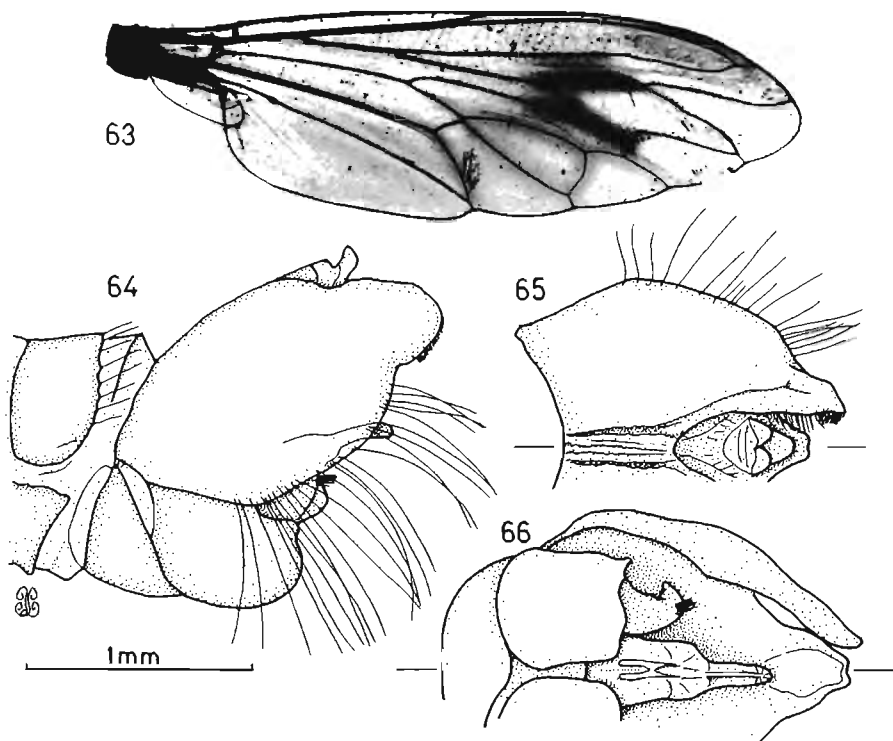
Redescription: Based on the neotype male.

Head: Antennae black; setae black. Eye:face ratio 1:0,24; eye:lower facial margin ratio 6,5:1. Mystax black with a few white setae midlaterally. Occipital setae: upper—long black proclinate; central—black; lower—white.

Thorax: ktg s and mtanepst s black (few fine white setae present). Mesonotal setae: acr black, well developed, anterior of suture; dc few black; pprn bare; 3/3 black npl; 2/2 black spal; 2/2 black pal. Mane weak black anteriorly, weak white posteriorly. Scutellum with 4 black marginal bristles, disc with 2 black bristles and 3 groups of white setae. Wing 7,2 × 2,6 mm; membrane transparent, with characteristic brown-stained mark at base of cell r_5 (Fig. 63 Paleisheuvel ♂ illustrated); cell r_5 closed; basal angle of cell r_4 —40°. Legs uniform dark red-brown to black; cx1 with black and white bristles and setae anteriorly; cx3 with 2–3 black and white bristles laterally. Hind femur with black bristles, long setae black (few white), short setae white (longish black ventrally).

Abdomen: Dark red-brown to black, fine gold-silver pruinose. T3 lacking bristles (are some black marginals on other segments); fine setae white except for a few black ones dorsally. S3 with long black setae. ♂ genitalia as in Figs 64–66 (Kalk Bay ♂ illustrated); epandrium shortish and broad in lateral view, with a group of thickish upwardly directed setae at the tip; gonostylus with a similar tuft of setae directed posteriorly; aedeagus stout with a pointed tip.

Neotype designation: Macquart evidently described the species on a single male from 'Du Cap.' collected by, or from the collection of, M. Serville. I cannot trace the type and assume it to be lost. In the interests of taxonomic stability I hereby designate a male, in excellent condition, specified below, as neotype. Although the



Figs 63–66. *Neolophonotus heteronevrus* (Macquart, 1838). 63. Wing of Paleisheuvel ♂. 64–66. Genitalia of Kalk Bay Mts. ♂. 64. Lateral. 65. Dorsal. 66. Ventral.

species has not been recognised since its description, its identity is not in doubt as Macquart states that the wing has a large brown spot (at about two-thirds wing length), and that cell r_5 is closed and stalked. The new material listed below represents a rediscovery of the species.

Variation: The species is sexually dichromatic in that the female mystax is yellow (a few black setae on lower facial margin); occipital setae mostly yellow; npl bristles are yellow; ktg s and mtanepst s are yellow; terga and sterna have most bristles white; tibiae are paler proximally; most leg bristles and setae are white and shortish.

Material examined: SOUTH AFRICA: *Cape Province*: 1♂ (neotype), 10 km NE Muizenberg (3418AB), 28.xi.1981, B. R. Stuckenberg, Coastal Macchia (NM); 1♀, Macchia slopes above Muizenberg—Cape Town (3418AB), 28.xi.1981, Stuckenberg (NM); 1♂ 1♀, Kalk Bay Mts (3418AB), xii.1946, Beck (NM); 1♀, Gifberg (3118DC), 24.x.1981, Schoeman (NM); 3♂, Strandfontein (3418BA) False Bay, 1.xi.1960 (SAM); 3♂ 6♀, Paleisheuvel (3218BC), xi.1948, Mus Exp (SAM); 1♂ 1♀, Saldanha Bay (3317BB), ix.1960, SAM (SAM). NM Type No. 3350.

Distribution: Known from the Mediterranean and southern parts of the Desert and Poor Steppe climatic regions.

Neolophonotus isse (Walker, 1849), **stat. rev.**

Figs 67-69

Asilus isse Walker, 1849: 449; Walker, 1855: 712.*Dysmachus isse*; Kertész, 1909: 278.

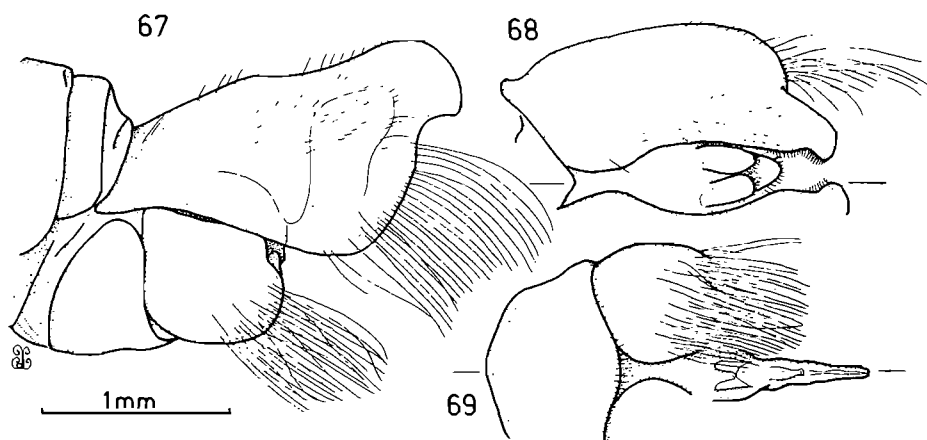
Redescription: Based on the holotype male (in poor condition).

Head: Antennae missing (other specimens have dark red-brown antennae with black setae except a few white ones dorsally on scape). Eye:face ratio 1:0,21; eye:lower facial margin ratio 7,5:1. Mystax yellow-white and brown (mostly along lower facial margin). Occipital setae: upper—long dark red-brown, proclinate; central—yellow-white and brown; lower—yellow-white.

Thorax: ktg s and mtanepst s yellow-white (most broken). Mesonotal setae: acr dark red-brown (most broken off); dc dark red-brown (most broken); pprn bare; 3/3 brown npl; 2/2 brown spal; 2/2 brown pal. Mane dark red-brown anteriorly, yellow-white posteriorly. Scutellum with 6 brown marginal bristles, disc with 3 groups of yellow-white setae. Wing $8,1 \times 2,5$ mm; membrane transparent (very dirty), with microtrichia at wingtip where R_{1+2} reaches wing margin; basal angle of cell r_4 — 24° . Legs dark brown (femora somewhat darker); cx1 with yellow-white bristles and setae anteriorly; cx3 with at least 1 (others may be broken off) yellow-white bristle laterally. Hind femur with brown-yellow bristles (1 brown), long setae white and brown, short setae white.

Abdomen: Dark red-brown, red-gold pruinose (is dirty). T3 lacking bristles (are some yellow marginals) on T1 and T2; fine setae yellow. S3 with short white setae. ♂ genitalia as in Figs 67-69; epandrium shortish and broad in lateral view, with many long setae along hind margin in lateral aspect; gonocoxite with long setae projecting posteriorly; aedeagus slender, pointed, with two ventral projections.

Synonymy: Hull (1962) and Oldroyd (1981) list *isse* in the synonymy of *N. pellitus*, but I do not consider that they are conspecific. *N. isse* lacks scutellar bristles and therefore falls out in quite a different section of the key provided in this paper.



Figs 67-69. *Neolophonotus isse* (Walker, 1849) holotype ♂ genitalia. 67. Lateral. 68. Dorsal. 69. Ventral.

Material examined: SOUTH AFRICA: 1♂ (holotype), S. Afr., 44–6, Dr Smith (BM). *Cape Province*: 1♂ 1♀, Stellenbosch (3318DD), xi.1924, Brauns (ZSM); 4♂ 1♀, Strandfontein (not 3418BA as on label but 3318CC) Groot Sandleege, 10–12.x.1977, Miller (1♂ Malaise trap) (NM); 1M, Piquetberg (3218DA), 9.viii.1941, Ac US (NM); 1♂, Lamberts Bay (3218AB), 23.x.1981, Schoeman (NM); 2♂ 1♀, 2.5mi S Elandsbaai (3218AD), 16.ix.1972, Irwin, coastal sand dunes (NM); 1♂, Klaver (Klawer—3218DC), 19.ix.1917, Roberts (NM); 23♂ 52♀ 3?, Bulhoek, Klaver—Clanw. (3218BB), x.1950, Mus Expd (SAM); 3♂, Knersvlakte north of Van Rhynsdorp (3118DA), 6–9.x.1964, Stuckenberg (NM); 37♂ 37♀ 4?, Leipoldville—Eland's Bay (3218AD), xi.1948, Mus Exp (SAM); 2♂, Elands Bay, 8.xi.1978 & 12.x.1979, Whitehead (SAM); 5♂ 5♀, Leipoldville (3218AB), xi.1956, SAM (SAM); 33♂ 22♀ 1?, Wallekraal (3017BC), x.1950, Mus Expd (SAM); 1♂, Lamberts Bay (3218AB), xi.1956, SAM (SAM); 1♂, Vredenburg (3217DD), 13.xi.1979, Whitehead (SAM); 3♂ 3F. W. coast D. area, Du Toitse Baai (?), 27.xi.1976, Whitehead (SAM); 1♂ 1♀ 6mi S Garies (2316CD) (SAM). NAMIBIA: 1♂ 2♀ 2?, S.W. Africa, Wilde (NM).

Distribution: Recorded from the Mediterranean and the Desert and Poor Steppe climatic regions.

***Neolophonotus karoensis* sp. n.**

Figs 70–72

Description: Based on the holotype male.

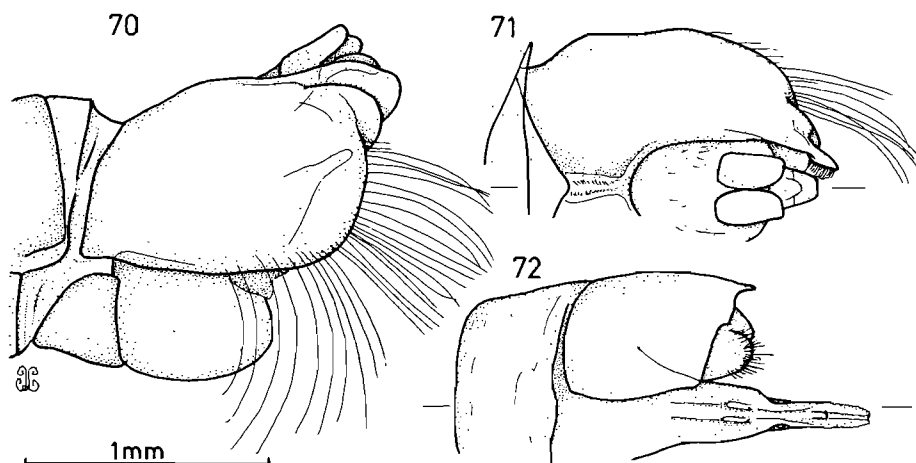
Head: Antennae dark red-brown; setae dark red-brown except for a few white ones dorsally on scape. Eye:face ratio 1:0.22; eye:lower facial margin ratio 8.5:1. Mystax white with few black setae dorsally and along lower facial margin. Occipital setae: upper—long black, proclinate; central and lower—white.

Thorax: ktg s and mtanepst s yellow (fine setae white). Mesonotal setae: acr not evident; dc ca 4 long black setae posterior of suture; pprn bare; 3/2 black npl; 2/2 black spal; 2/2 black (1 yellow) pal. Mane black anteriorly, white posteriorly. Scutellum with 4 black marginal bristles, disc with 2 black bristles and white setae. Wing 6.8 × 2.5 mm; membrane transparent, with dark microtrichia near wing tip where R_{1+2} reaches margin; basal angle of cell r_4 —28°. Legs dark red-brown (femora somewhat darker); cx1 with white setae anteriorly; cx3 with 2 white bristles laterally. Hind femur with yellow-white bristles, long setae black, white on posterior surface, short setae white.

Abdomen: Dark red-brown, gold pruinose. T3 with 1 black discal and a few short white marginals; fine setae white, a few black on hind margin dorsally. S3 with yellow-white bristles and white setae. ♂ genitalia as in Figs 70–72 (paratype illustrated); epandrium short and broad, with many, long setae on hind margin in lateral aspect; gonocoxite with shallow dorsally projecting flange; aedeagus slender, pointed, with two small ventral projections.

Paratypes: 3♂ 8♀, agree well with holotype.

Material examined: SOUTH AFRICA: *Cape Province*: 1♂ (holotype) 2♂ 8♀ (paratypes), 6 km N Uniondale (3323CA), 11.xii.1979, Stuckenberg & Londt, dry



Figs 70–72. *Neolophonotus karoensis* sp. n. paratype ♂ genitalia. 70. Lateral. 71. Dorsal. 72. Ventral.

karoo vegetation (NM); 1 ♂ (paratype), Uniondale, 25.xii.1919, Dr Brauns (NM). NM Type No. 3351.

Distribution: Known only from the Uniondale area in the Little and Great Karoo climatic region.

Neolophonotus maculipennis (Lindner, 1955), **comb. n.**

Figs 73–76

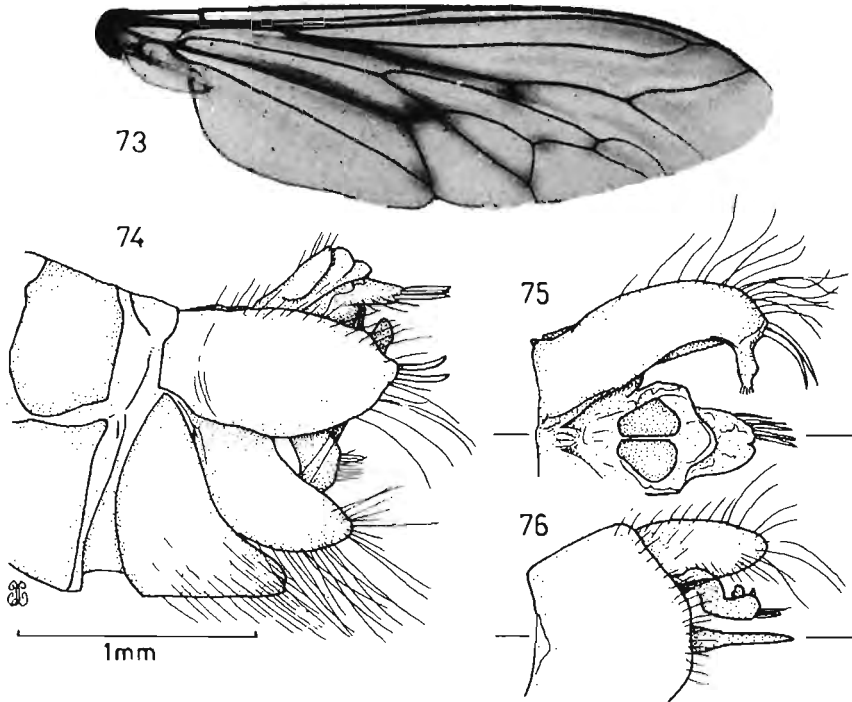
Antilophonotus maculipennis Lindner, 1955: 38–39; Hull, 1962: 536; Oldroyd, 1981: 335.

Redescription: Based on the unique holotype male.

Head: Scape and pedicel yellow-brown, rest dark red-brown; setae dark red-brown (few white dorsally). Eye:face ratio 1:0,21; eye:lower facial margin ratio 8,8:1. Mystax white, many black setae in dorsal part and along lower facial margin. Occipital setae: upper—long black; central—white and yellow-white; lower—white.

Thorax: ktg s brown yellow; mtanepst s black. Mesonotal setae: acr few black, well developed, anterior of suture; dc ca 6 black, extend anterior of suture; pprn bare; 3/3 dark red-brown npl; 2/2 dark red-brown spal; 1/1 dark red-brown pal. Mane very weak black (a few white setae) anteriorly, weak white posteriorly. Scutellum with 2 dark red-brown marginal bristles, disc with white setae only. Wing 5,9 × 2,0 mm; membrane transparent, with characteristic brown-stained veins as in Fig. 73. Legs dark red-brown except for joints (especially of trochanter) which are orange-brown; cx1 with white setae anteriorly; cx3 with 2 white bristles laterally. Hind femur with white bristles (a few black), long setae few, dark red-brown, short setae white.

Abdomen: Dark red-brown, fine gold pruinose. T3 with 2–3 white marginals and 1–2 white discals; fine setae white except for a few black ones dorsally. S3 with dark red-brown and white bristles and white setae. ♂ genitalia as in Figs 74–76;



Figs 73–76. *Neolophonotus maculipennis* (Lindner, 1955) holotype ♂. 73. Wing. 74–76. Genitalia. 74. Lateral. 75. Dorsal. 76. Ventral.

epandrium shortish, with an inwardly directed process subapically (seen in dorsal view); gonocoxite partly covered by hypandrium; gonostylus well-developed and with a cluster of posteriorly directed setae; aedeagus elongate and strongly flexed upwards; hypoproct with a row of strong bristles.

Material examined: TANZANIA: 1♂ (holotype), Jipe-See (Lake Jipe—0337DA), 20–23.v.1952, D.O. Afrika Exp. (SMS).

Distribution: Known only from the type-locality.

Synonymy of *Antilophonotus*: As I have already stated in the first part of this series, the characters used by Lindner to define *Antilophonotus* are inadequate.

Remarks: *N. maculipennis* is a member of a subgroup of the *pellitus* species-group comprising *vansoni*, *bromleyi*, *bamptoni* and *salina*.

Neolophonotus marshalli Hobby, 1934

Figs 77–79

Neolophonotus (Lophopeltus) marshalli Hobby, 1934: 237–9; Hull, 1962: 533.

Lophopeltis marshalli; Cuthbertson, 1935: 49 & 1937: 18.

Neolophonotus marshalli; Oldroyd, 1981: 340.

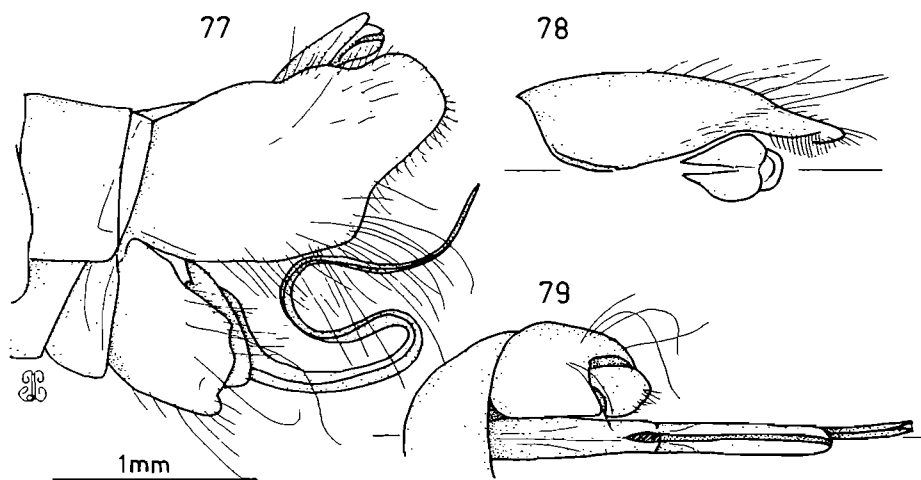
Redescription: Based on the holotype male.

Head: Antennae dark red-brown; setae black (few white). Eye:face ratio 1:0,22; eye:lower facial margin ratio 9,0:1. Mystax mostly black, but with a cluster of white

setae dorsally and a few, short, white setae laterally. Occipital setae: upper—long, black, proclinate; central—black and yellow-white; lower—white.

Thorax: ktg s and mtanepst s yellow-brown (1 black mtanepst s). Mesonotal setae: acr long, black, anterior of suture only; dc long, black; pprn bare; 3/3 black npl; 2/2 black spal; 1/1 black pal. Mane short black anteriorly (short white setae bordering), white posteriorly. Scutellum with 4 black marginal bristles, disc with 4 black bristles and a good cluster of white setae. Wing $8,5 \times 3,0$ mm; membrane transparent, without dark markings; basal angle of cell r_4 — 32° . Legs dark red-brown, proximal parts of tibiae orange-brown; cx1 with white setae anteriorly; cx3 with 1–2 yellow-white bristles laterally. Hind femur: bristles yellow (1–2 black), long setae black (few white), short setae white.

Abdomen: Dark red-brown to black, fine red-gold pruinose. T3 with black and yellow marginal bristles; fine setae white except for a few black ones dorsally. S3 with yellow bristles and white setae. ♂ genitalia as in Figs 77–79; aedeagus elongate and sinuous.



Figs 77–79. *Neolophonotus marshalli* Hobby, 1934 holotype ♂ genitalia. 77. Lateral. 78. Dorsal. 79. Ventral.

Female: Similar to ♂ but more white setae in mystax (HEC paratype ♀ somewhat smaller than holotype—wing 5,8 mm long); upper and central occipitals yellow; some npl bristles yellow.

Material examined: ZIMBABWE: 1♂ (holotype) 1♀ (paratype), Salisbury (= Harare 1731CC), Mashonaland, 6.v.1906, G. A. K. Marshall (HEC); 1♂, Salisbury, 18.vi.1938, Cuthbertson, Dept Agric S Rhodesia (NMZ); 1♀ (paratype), Bulawayo (2028BA), Hunyani, 29.iv.1934, 3689, S. Rhodesia Dept Agric (NMZ); 2♂, Umtali Dist. (1932BB), Hoboken, 12.x.1931, Sheppard (NM); 3♂ 1♀, Bulawayo, 13.v.1923 & 3.vi.1923, Stevenson (NM SAM); 1♂, Bulawayo, 8.v.1920, Rhodesia Museum (NMZ); 1♀, Bulawayo, 27.viii.1922, Stevenson (NM); 2♂, Matopos (2028CB) Bulawayo, 2.v.1965, Nat Museum S R (NMZ); 1♂,

Turk Mine (1928DB), iii.1957, Nat Museum S Rhodesia (NMZ); 1♂, Wedza (1831DA), 3.vii.1973, Erasmus (NM); 1♀, Limpopo R. 10 mls E of Shashi River (2229AB), 8–12.v.1967, Miller (NMZ); 1♂ 1♀, Balla Balla (2029AC), vi.1963, Nat Museum S Rhodesia (NMZ). MOZAMBIQUE: 1♂, Mozambique (ZSM); 1♂, Augustino Farm, Revue Station (?). 13.vi.1968, Nat Museum S Rhodesia (NMZ); 1♂, Zambeze, Nhandoula, env. de Chiramba (?), 6.iv.1929, Lesne (MNP); 2♂ 2♀, Moulima (? Molima—1734BC), 25.iv.1929, Lesne (MNP); 2♂ 1♀, Funhaloura—Mabote (2334AB), 9.vi.1963, Gess (SAM); 1♂, Noambo (?), 22.iii.1953, Dias (Maputo Museum); 1♀, Massangena (2132DB), 27.v.1959 (Maputo Museum). SOUTH AFRICA: *Transvaal*: 1♂, Boschhoek (2327BD or 2427DA) (ZSM). *Natal*: 1♂, Ndumu Reserve (2632CD), Ingwavuma dist, 3.iv.1961, Oatley (NM). Distribution: Zimbabwe, southern Mozambique, northern Transvaal and subtropical northern Natal.

Prey record: Araneae: Salticidae (1).

***Neolophonotus megaphallus* sp. n.**

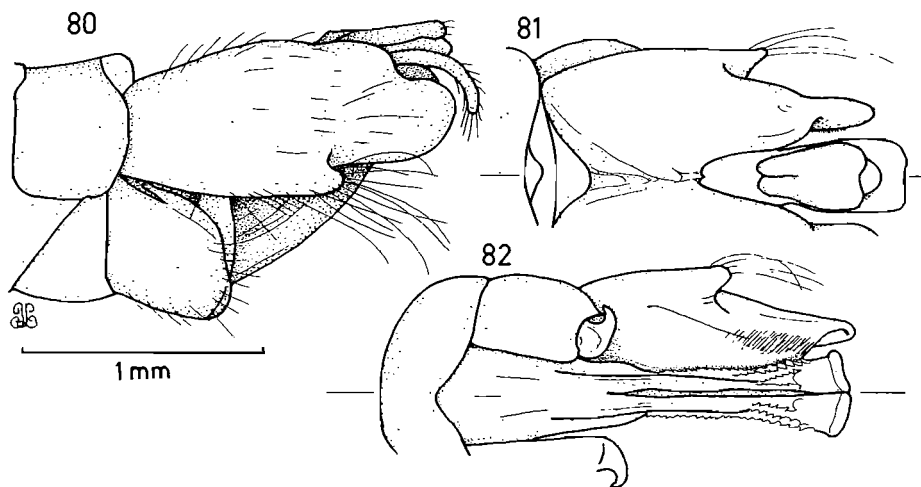
Figs 80–82

Etymology: Gr. *megas*—large, *phallos*—penis. Refers to the large aedeagus.

Description: Based on the holotype male.

Head: Antennae black; bristles and setae black except for 2 white setae on ventral aspect of scape. Eye:face ratio 1:0.21; eye:lower facial margin ratio 8.6:1. Mystax white except for black setae along lower facial margin. Occipital setae: upper and central—black; lower—white.

Thorax: ktg s pale yellow-white; mtanepst s black (1–2 bristles) and white. Mesonotal setae: acr black, anterior of suture; dc ca 8 pairs black, extend well



Figs 80–82. *Neolophonotus megaphallus* sp. n. holotype ♂ genitalia. 80. Lateral. 81. Dorsal. 82. Ventral.

anterior of suture; pprn bare; 3/3 black npl; 2/2 black spal; 1/1 black pal. Mane short black anteriorly, bordered by short white setae, white posteriorly. Scutellum with 4 black marginal bristles, disc with 4 black bristles and white setae. Wing $6,5 \times 1,9$ mm; membrane transparent and without obvious markings; basal angle of cell r_4 — 24° . Legs: Femora dark red-brown, tibiae red-brown; cx1 with white setae anteriorly; cx3 with 1 white bristle laterally. Hind femur with bristles dark red-brown (1–2 white), long setae black and white, short setae white dorsally and laterally, black ventrally.

Abdomen: Black, silver pruinose, T3 with 3 white marginal bristles; fine setae white. S3 with 4 white bristles and white setae. ♂ genitalia as in Figs 80–82; epandrium elongate with a lateral process midventrally (best seen in lateral view); aedeagus large, robust, and spinose ventrally.

Paratype: 1♂, agrees well with holotype.

Material examined: NAMIBIA: 1♂ (holotype), 72 km S Aus (2716AB), 1.ix.1983, Stuckenberg & Londt, broken veld in dry river bed/open area (NM); 1♂ (paratype), Namuskluft 88, SE 2716Dd, 7–15.x.1970, H11077 (SMW). NM Type No. 3352, SMW Type No. T699.

Distribution: Known only from the southern parts of Namibia in the Desert and Poor Steppe climatic region.

***Neolophonotus melinus* sp. n.**

Figs 83–85

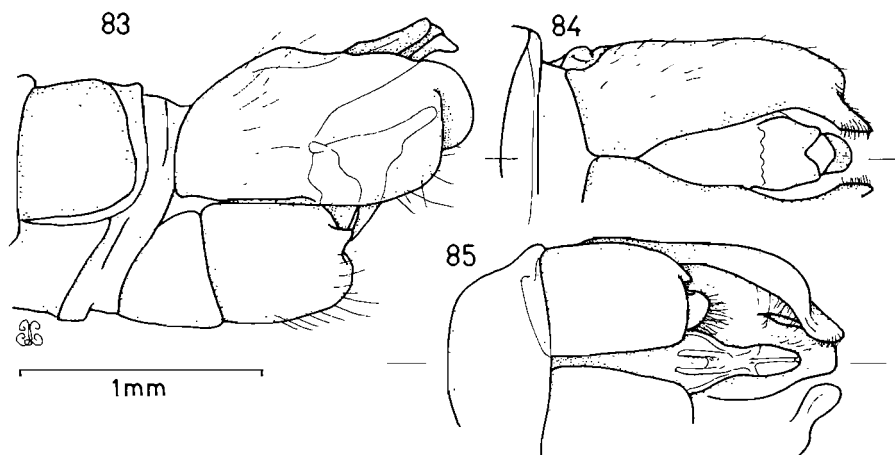
Etymology: *L. melinus*—yellow (honey-coloured). Refers to the colour of this species.

Description: Based on the holotype male.

Head: Antennae dark red-brown; bristles and setae black and yellow (no yellow ones on ventral aspect of pedicel). Eye:face ratio 1:0,21; eye:lower facial margin ratio 8,6:1. Mystax yellow except for black setae laterally on lower facial margin. Occipital setae: upper—black; central and lower—yellow.

Thorax: ktg s and mtanepst s yellow. Mesonotal setae: acr well-developed, black, anterior of suture; dc ca 7 pairs black, extend well anterior of suture; pprn bare; 4/3 black npl; 2/2 black spal; 2/2 (1 black 1 yellow) pal. Mane short black anteriorly, bordered by short yellow setae anteriorly, longish yellow posteriorly. Scutellum with 4 (3 black 1 yellow) marginal bristles, disc with 3 (2 black 1 yellow) bristles and pale yellow setae. Wing $6,2 \times 1,9$ mm; membrane transparent and without obvious markings; basal angle of cell r_4 — 22° . Legs: Femora dark red-brown, rest red-brown; cx1 with yellow setae anteriorly; cx3 with 2 yellow bristles laterally. Hind femur with bristles, long and short setae yellow.

Abdomen: Dark red-brown silver-gold pruinose. T3 with 2–3 yellow marginal bristles; fine setae yellow except for a few black ones posterodorsally. S3 with 2 yellow bristles and yellow setae. ♂ genitalia as in Figs 83–85 (paratype illustrated); epandrium elongate, slightly notched distally in lateral view; aedeagus short, stout, with pointed apex and two small ventral projections.



Figs 83–85. *Neolophonotus melinus* sp. n. paratype ♂ genitalia. 83. Lateral. 84. Dorsal. 85. Ventral.

Paratypes: 22♂ 7♀ 2? similar to holotype.

Material examined: SOUTH AFRICA: *Cape Province*: 1♂ (holotype) 7♂ 3♀ (paratypes), 9 km SW Willowmore (3323AD), 30–31.x.1978, J. Londt & R. Miller, open Karoo scrub (NM); 8♂ 2♀ (paratypes), Willowmore, 30.xi.1906 x.1907 20.xi.1909 1 & 15.x.1916 10.x.1919 27.x.1920, Dr Brauns (NM); 1♂ (paratypes), Swartkops, P. Elizabeth (3325DC), 21.xii.1902, Dr Brauns (NM); 1♂ 1♀ (paratypes), same data, 20.xi.1909 1.xii.1917, Dr Brauns (SAM); 4♂ 1♀ 2? (paratypes), Koup Siding—Laingsburg (3320BB) x.1952, Mus Expd (SAM); 1♂ (paratype), Ysterfontein (3218BA), ix.1960, SAM (SAM); 1♂ (paratype), Cold Bokkeveld, Ceres Dist. (3319AD), 15–30.x.1934, Versfeld (SAM). NM Type No. 3353, SAM Type No. 5004.

Distribution: Found in the Mediterranean, Little and Great Karoo, and South Cape Coastal climatic regions.

***Neolophonotus membrana* sp. n.**

Figs 86–89

Etymology: *L. membrana*—membrane. Refers to the very thin, membrane-like, dorsal flange or keel on the gonocoxite.

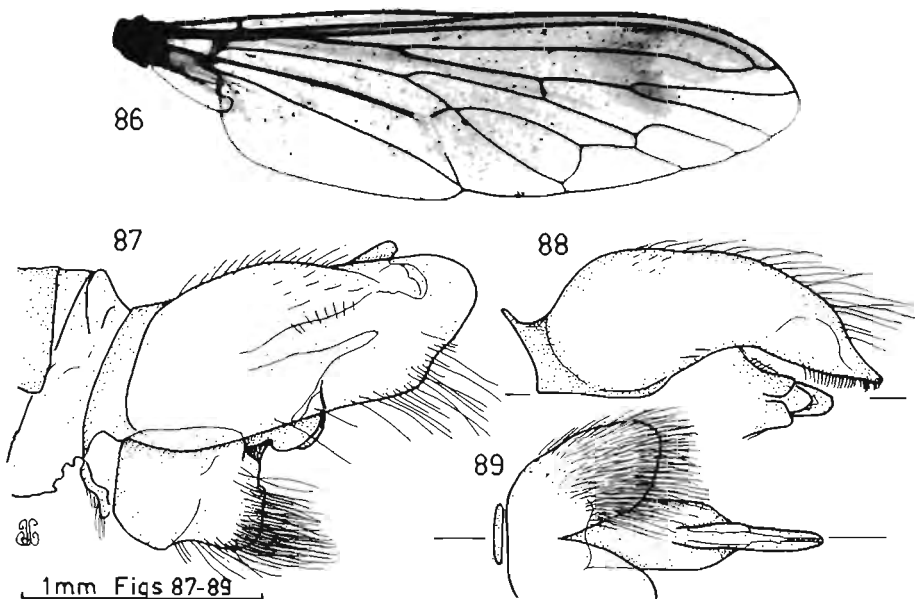
Description: Based on the holotype male.

Head: Antennae dark red-brown; bristles and setae dark red-brown except those ones on ventral aspect of scape which are white. Eye:face ratio 1:0,23; eye:lower facial margin ratio 6,7:1. Mystax pale yellow. Occipital setae: upper—dark red-brown and yellow; central—pale yellow; lower—white.

Thorax: ktg s and mtanepst s white. Mesonotal setae: acr black, anterior of suture; dc ca 6 pairs black and white, extend anteriorly of suture; pprn bare; 3/3 pale yellow

npl; 2/2 pale yellow spal; 2/1 pale yellow pal. Mane weak black anteriorly, bordered by short white setae anteriorly, white posteriorly. Scutellum with 4 pale yellow marginal bristles, disc with 3 pale yellow bristles and white setae. Wing 6.8×2.3 mm; membrane transparent with characteristic yellow stain around fork of R_{4+5} ; area bordered by stain, vein R_4 , and wing margin opaque white (Fig. 86); basal angle of cell r_4 — 17° . Legs: Femora dark red-brown, rest yellow-brown; cx1 with white setae anteriorly; cx3 with 2 white bristles laterally. Hind femur with all bristles and setae white.

Abdomen: Dark red-brown, gold-silver pruinose. T3 with short white setae only. S3 with 4 white bristles and white setae. ♂ genitalia as in Figs 87–89 (paratype illustrated); epandrium elongate, slightly notched distally in lateral view; hypandrium highly reduced; gonocoxites with long posteriorly directed setae and a thin, transparent dorsal flange; aedeagus with stout base and pointed apex, and a characteristic ventral projection.



Figs 86–89. *Neolophonotus membrana* sp. n. 86. Wing of holotype ♂. 87–89. Paratype ♂ genitalia. 87. Lateral. 88. Dorsal. 89. Ventral.

Paratypes: 3♂ 5♀ similar to holotype.

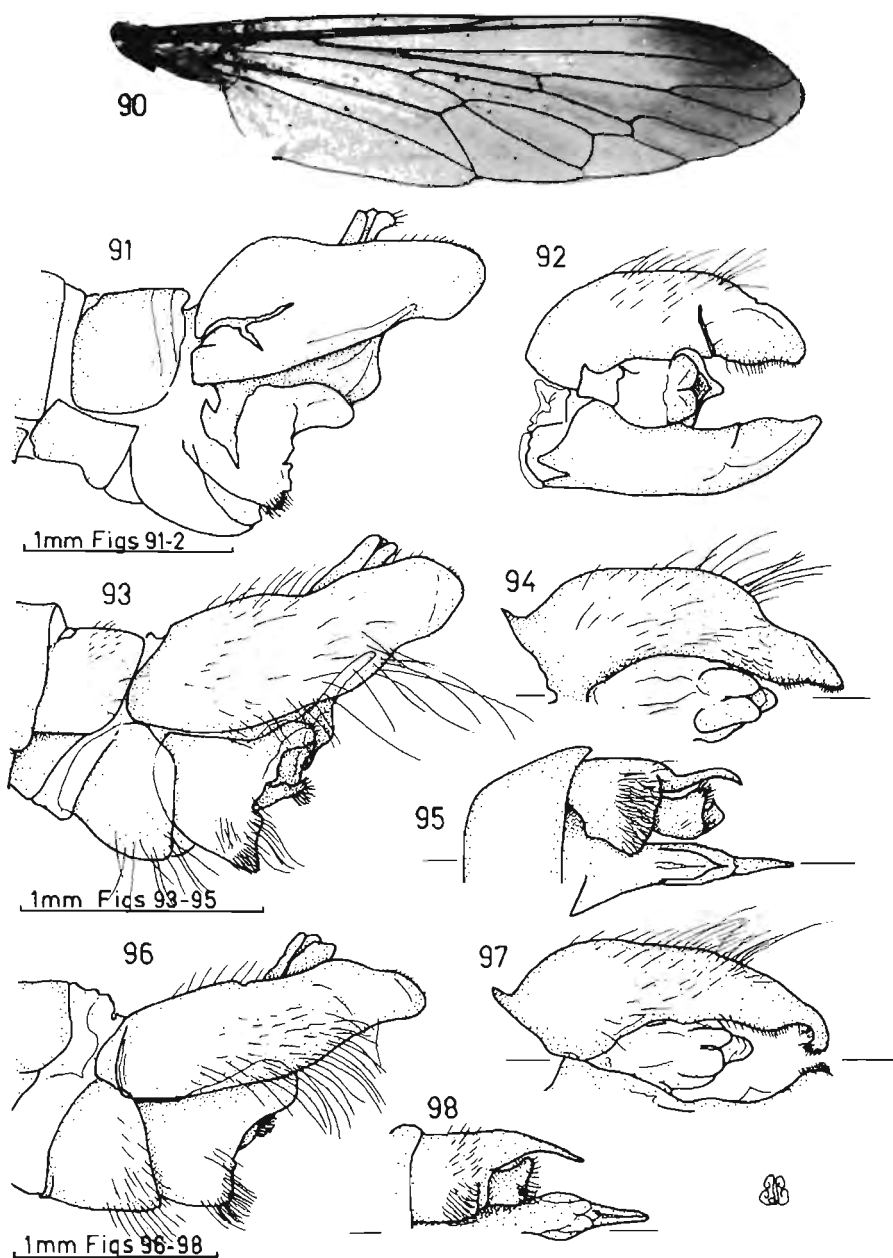
Material examined: SOUTH AFRICA: *Cape Province*: 1♂ (holotype) 3♂ 5♀ (paratypes), Richmond Dist (3123BD), ix.1939, Mus Staff (SAM NM). SAM Type No. 5005, NM Type No. 3354.

Distribution: Known only from the type-locality in the S & N Steppe climatic region.

Neolophonotus micropterus (Macquart, 1838) **comb. n.**

Figs 90–98

Asilus micropterus Macquart, 1838: 151; Kertész, 1909: 260; Hull, 1962: 546.*Lophonotus pulcher* Loew, 1858: 339; Loew, 1860: 159–60, **syn. n.***Dysmachus pulcher*; Kertész, 1909: 280.*Neolophonotus (Lophopeltis) pulchra*; Engel, 1927: 177–8; Hull, 1962: 533; Hull, 1967: 268.*Neolophonotus (Lophopeltis) rufus* Hull, 1967: 270–1, **syn. n.***Neolophonotus rufulus* Oldroyd, 1981: 341 (nom. n. for *rufus* Hull), **syn. n.***Neolophonotus pulcher*; Oldroyd, 1981: 341.**Redescription:** Based on the holotype male (not female as supposed by Macquart).**Head:** Antennae dark red-brown to black; setae dark red-brown. Eye:face ratio 1:0.22; eye:lower facial margin ratio 9.5:1. Mystax yellow (few black setae in upper part and on lateral aspects of lower facial margin). Occipital setae: upper—dark red-brown and yellow; central—yellow; lower—white.**Thorax:** ktg s and mtanepst s yellow and white. Mesonotal setae: acr dark red-brown (most rubbed off); dc dark red-brown, extend anterior of suture (many broken off); pprn bare; 3/3 npl (broken off); 2/2 black spal; 1/1 black pal. Mane rubbed off anteriorly, yellow posteriorly. Scutellum with 6 marginal bristles (4 yellow 2 black), disc with three clusters of yellow setae (no bristles evident). Wing 5.9 × 1.8 mm; membrane transparent, tip grey-shaded due to presence of dark microtrichia (Fig. 90); basal angle of cell r_4 —26°. Legs: femora dark red-brown with proximal and distal ends paler; other parts largely dark brown; cx1 with yellow bristles and white setae anteriorly; cx3 with 1 white bristle laterally. Hind femur with long white-yellow bristles (a few dark red-brown in distal region), long setae white (few), short setae white.**Abdomen:** Dark red-brown, fine silver-gold pruinose. T3 apparently lacking bristles (yellow ones present in other specimens); fine setae yellow laterally, black dorsally. S3 obscured by dirt (other specimens have short white setae). ♂ genitalia as in Figs 91–92 (rather badly fractured); epandrium elongate with fine setae on inner faces of tip; gonocoxite with a ventrally situated setose swelling, and a dorsally projecting flange-like process; aedeagus fairly elongate with pointed apex.**Material examined:** 1♂ (holotype), no label data other than 'Mystachus apicalis', 'Asilus micropterus', Macq. coll No. 609 (MNP). SOUTH AFRICA: *Cape Province*: 1♂ (holotype—*pulcher*), Cap. B Spei., Victorin, 18 302 (NRS); 1♂ (holotype—*rufulus*), Cape Agulhas (3420CC), 31.xii.1950, Swedish S.A. exp, Brink & Rudebeck, No. 101 (ZML); 6♂ 7♀, 10 km NE Muizenberg (3418AB), 28.xi.1981, Stuckenberg, Coastal Macchia (NM); 1♂, Gordon's Bay (3418BB), i.1919, Voss (NM); 6♂ 2♀, Kommetjie (3418AB), 10.i.1971, Strydom (NCI); 1♂, Fishhoek (3418AB), 19.xi.1970, Pinhey, Nat Museum S.R. (NMZ); 4♂ 7♀, Strandfontein (3418BA) False Bay, 1.xi.1960 (SAM); 1♂, Hopefield (3318AB), ix.1960, SAM (SAM); 3♂ 6♀, Strandfontein, ii.1949, Mus Exp (SAM); 50♂ 34♀ 2?, Pearly Beach (3419CB), Bredasdorp, xii.1958, SAM (SAM); 1♂, Duinefontein (3318CB), 10.xi.1979, Whitehead (SAM). *Natal*: 1♂, Eshowe (2831CD), ii.1948, Anderson (NM).**Distribution:** A species inhabiting the Mediterranean climatic region. The specimen from Eshowe is probably mislabelled.



Figs 90-98. *Neolophonotus micropterus* (Macquart, 1838). 90-92. Holotype ♂. 90. Wing. 91-92. Genitalia. 91. Lateral. 92. Dorsal. 93-98. Genitalia of other males. 93-95. Holotype of *pulcher*. 93. Lateral. 94. Dorsal. 95. Ventral. 96-98. Holotype of *rufulus*. 96. Lateral. 97. Dorsal. 98. Ventral.

Synonymy: Apart from being catalogued by both Kertész and Hull, Macquart's *micropterus* has never been referred to since its description, perhaps because Macquart's specimen carried no locality data ('Patrie inconnue'). On seeing the type in the MNP I immediately recognised it as a specimen of what I had up till then accepted as *N. pulcher* Loew, an unmistakable southern African species. Unfortunately the type has badly fractured genitalia (probably the reason why Macquart thought it was a female). For this reason I have also provided illustrations of the intact holotype of *pulcher* (Figs 93–95) and *rufulus* (Figs 96–98). The species Hull described under the name *rufus* (a name previously used by Macquart in 1838, and changed to *rufulus* by Oldroyd) is clearly synonymous with *micropterus*.

Neolophonotus minutus Hull, 1967.

Figs 99–105

Neolophonotus (Lophopeltis) minutus Hull, 1967: 276–8.
Neolophonotus minutus; Oldroyd, 1981: 341.

Redescription: Based on the holotype male.

Head: Antennae dark red-brown; setae dark red-brown (few white dorsally and ventrally on scape). Eye:face ratio 1:0.23; eye:lower facial margin ratio 8.0:1. Mystax uniform shiny white. Occipital setae: upper—long black; central—short black and white; lower—shiny white.

Thorax: ktg s and mtanepst s white. Mesonotal setae: acr ca 5 long black, anterior of suture; dc black, extend well anterior of suture; pprn bare; 3/3 dark red-brown npl; 2/2 dark red-brown spal; 2/2 black pal. Mane weak dark red-brown anteriorly (bordered by short white setae), white posteriorly. Scutellum with 4 dark red-brown marginal bristles, disc with 4 dark red-brown bristles and white setae. Wing 4.6 × 1.6 mm; membrane transparent and without obvious markings (Fig. 99); basal angle of cell r₄—37°. Legs: Femora dark red-brown, rest dark brown; cx1 with white setae anteriorly; cx3 with 2 white bristles laterally. Hind femur with dark red-brown bristles (few white), long and short setae white.

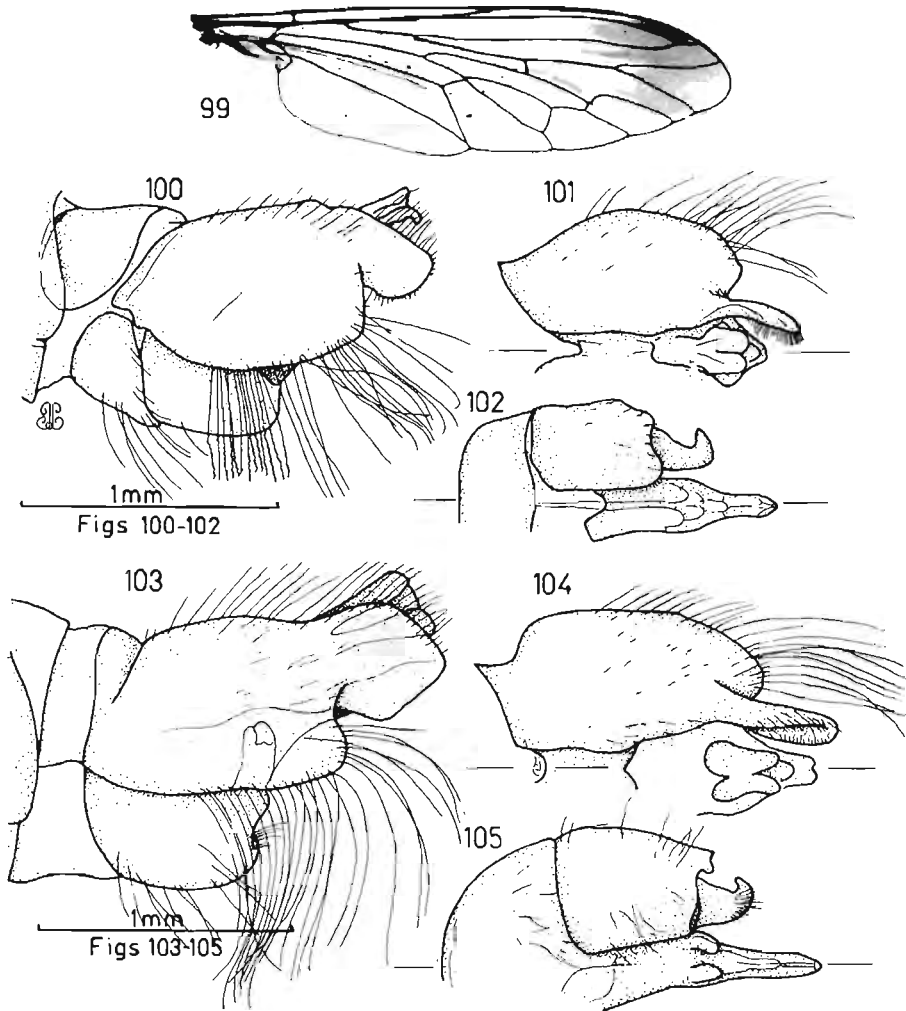
Abdomen: Dark red-brown, silver pruinose. T3 with 2 white marginal bristles; fine setae white. S3 with 2 white bristles marginally and black and white setae. ♂ genitalia as in Figs 100–102; epandrium with many long setae and an upper, laterally compressed distal lobe; aedeagus moderately long with pointed tip.

Variation: The Strandfontein ♂ has slightly different genitalia (Figs 103–105) but this is not considered significant.

Material examined: SOUTH AFRICA: *Cape Province:* 1 ♂ (holotype), 7 miles SW Bredasdorp (3420CA) 30.xii.1950, Swedish S.A. Exped, Brink & Rudebeck, No 99 (ZML); 1 ♂, Still Bay (3421AD), 9–12.xii.1940, Van Son (NM); 1 ♂, Strandfontein (3418BA), ii.1949, Mus Exp (SAM); 1 ♂, Algoa Bay (Port Elizabeth—3325DC), 22.x.1895, Brauns (ZSM); 1 ♂ 1 ♀, Port Elizabeth, Cape Recife Area (3425BA), 22–27.xii.1985, Londt, reserve (NM); 1 ♂, Pearly Beach (3419CB), Bredasdorp, xii.1958, SAM (SAM).

Distribution: A species inhabiting the Mediterranean and S Cape Coastal climatic regions.

Notes: Hull's holotype identification label gives the name of the species as



Figs 99–105. *Neolophonotus minutus* Hull, 1967. 99–102. Holotype ♂. 99. Wing. 100–102. Genitalia. 100. Lateral. 101. Dorsal. 102. Ventral. 103–105. Genitalia of Strandfontein ♂. 103. Lateral. 104. Dorsal. 105. Ventral.

'*Lophopeltis minutus*'. The Still Bay ♂ bears a peculiar identification label '*Lophopeltis minutus* Bromley, det. H. Oldroyd 1973'.

Neolophonotus molitor (Wiedemann, 1828)

Figs 106–111

Asilus molitor Wiedemann, 1828: 450; Walker, 1855: 712.

Lophonotus molitor; Schiner, 1867: 401.

Dysmachus molitor; Kertész, 1909: 278; Ricardo, 1920: 386.

Neolophonotus (Lophopeltis) molitor; Engel, 1927: 173–4; Hull, 1962: 533.

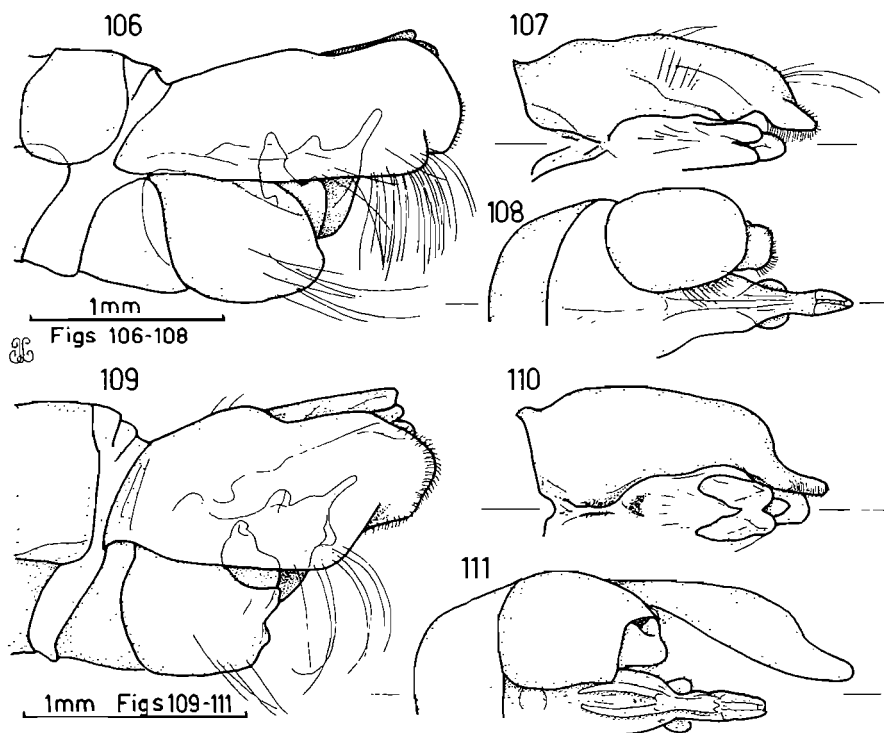
Neolophonotus molitor; Eflatoun, 1934: 77–9 (nec. Wiedemann, 1828); Oldroyd, 1981: 341.

Redescription based on holotype male.

Head: Antennae dark red-brown; setae dark red-brown and white ventrally, white dorsally. Eye:face ratio 1:0,23; eye:lower facial margin ratio 7,5:1. Mystax mainly white but dark red-brown on lower facial margin. Occipital setae: upper—long black; central—pale yellow; lower—white.

Thorax: ktg s and mtanepst s pale yellow. Mesonotal setae: acr black, anterior of suture only; dc black, extend anterior of suture; pprn bare; 3/3 black np!; 2/2 black spal; 2/2 black pal. Mane weak black anteriorly, bordered by small white setae, long white posteriorly. Scutellum with 4 black marginal bristles, disc with white seta only. Wing $6,7 \times 2,1$ mm; membrane transparent and lacking distinctive markings; basal angle of cell r_4 — 25° . Legs dark red-brown with tibiae paler proximodorsally; cx1 with white setae anteriorly; cx3 with 2 white bristles laterally. Hind femur bristles white (1 black), long setae black (few white), short setae white.

Abdomen: Dark red-brown, fine silver-gold pruinose. T3 with 2 white marginal and 1 dark red-brown discal bristles; fine setae white laterally, black dorsally (narrow longitudinal strip). S3 with *ca* 8 black and white bristles and black and white setae. ♂ genitalia as in Figs 106–108; epandrium elongate with long setae ventrodistally (in lateral aspect); gonocoxite well developed with posteriorly directed setae;



Figs 106–111. *Neolophonotus molitor* (Wiedemann, 1828) ♂ genitalia. 106–108. Holotype. 106. Lateral. 107. Dorsal. 108. Ventral. 109–111. Prince Alfred Pass ♂. 109. Lateral. 110. Dorsal. 111. Ventral.

aedeagus moderate in length, pointed apically and with small wing-like projections at about mid-length (in ventral aspect).

Variation: The Prince Alfred Pass ♂ has slightly different genitalia (Figs 109–111) but, for the present, I accept this as a specimen of *molitor*.

Material examined: SOUTH AFRICA: *Cape Province*: 1 ♂ (holotype), Capland, Krebs S (poorly written), 2137 (ZMB); 13 ♂ 9 ♀, 15 km SE Kirkwood (3325DA), 4.xi.1978, Miller & Londt, open bushveld scrub (NM); 1 ♂ 1 ♀, Dias Memorial area near Bokness (3326DA), 25.i.1934, Barraclough, coastal forest margins (NM); 1 ♂, Prince Alfred Pass Summit (3323CC), 11.xii.1979, Stuckenberg & Londt, old lands (NM); 4 ♂ 2 ♀, Richmond (3123BD), xi.1939, Mus Staff (SAM); 5 ♂ 1 ♀, Dreunberg, Burghersdorp (3026CD) Albert Dist., xi.1939, Mus Staff (SAM); 1 ♂, Burghersdorp, xi.1939, Mus Staff (SAM); 7 ♂ 3 ♀, Venterstad Region (3025DD), x.1935, Mus Staff (SAM); 1 ♂, Resolution, Grahamstown (3326BC), 1929, Walton (SAM); 1 ♂ 2 ♀, Clifton Farm, 22 km NW Grahamstown (3326AB), 3 & 5.i.1986, Londt & Gess, arid area (NM).

Distribution: The species appears to occur in the S & N Steppe and S Cape Coastal climatic regions of the eastern Cape Province.

Remarks: Many specimens previously identified as *molitor* are incorrectly named. It is not known exactly where the type was collected, but as it is probable that it came from the eastern Cape, I hereby fix the type-locality as 15 km SE Kirkwood, where a number of good specimens were collected. The Egyptian records given by Efflatoun are of *efflatouni* sp. n. described in this paper.

Prey records: Diptera: Bombyliidae (1).

***Neolophonotus munroi* sp. n.**

Figs 112–114

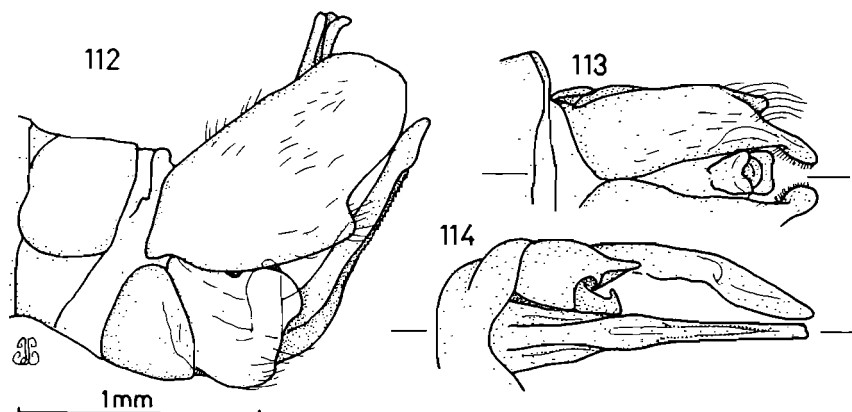
Etymology: Named after the late Dr H. K. Munro whose collecting produced many interesting Asilidae.

Description: Based on the holotype male.

Head: Antennae dark red-brown; scape with black and white setae, pedicel with all setae black. Eye:face ratio 1:0.21; eye:lower facial margin ratio 6.7:1. Mystax white in upper and central part, black in lower part and on lower facial margin. Occipital setae: upper—black; central—black and pale yellow; lower—white.

Thorax: ktg s and mtanepst s yellow and white. Mesonotal setae: acr black, anterior of suture; dc ca 6 pairs black, extend anterior of suture; pprn bare; 3/3 yellow and black npl; 2/2 black spal; 1/1 black pal (also has strong black setae). Mane black, well-developed anteriorly, white posteriorly. Scutellum with 4 black marginal bristles, disc with 4 weak, black bristles and white setae. Wing 5.9 × 1.8 mm; membrane transparent and without obvious markings. Legs dark red-brown, tibiae orange-brown proximodorsally; cx1 with white setae anteriorly; cx3 with 1 white bristle laterally. Hind femur with bristles pale yellow and dark red-brown, long and short setae dark red-brown and white.

Abdomen: Black, silver-gold pruinose. T3 with 1–2 yellow marginal bristles; fine setae short white laterally and black posterodorsally. S3 with 4 white bristles and



Figs 112–114. *Neolophonotus munroi* sp. n. holotype ♂ genitalia. 112. Lateral. 113. Dorsal. 114. Ventral.

short white setae. ♂ genitalia as in Figs 112–114; epandrium with small mid-ventral lobe (in lateral view); hypandrium flattened dorsodistally (see lateral and ventral aspects); aedeagus long, thick and directed upwards, with two rows of minute spines along ventral aspect.

Paratype: 1♂, agrees well with holotype but a little larger (wing length—7,9 mm).

Material examined: SOUTH AFRICA: *Cape Province*: 1♂ (holotype), Richtersveld (2816BB), Dolomite Peaks, x.1955, H. K. Munro (NCI); 1♂ (paratype), Wallekraal (3017BC), Namaqualand, x.1950, Mus Exp (SAM). SAM Type No. 5006.

Distribution: Namaqualand area of the Desert and Poor Steppe climatic region.

***Neolophonotus niveus* sp. n.**

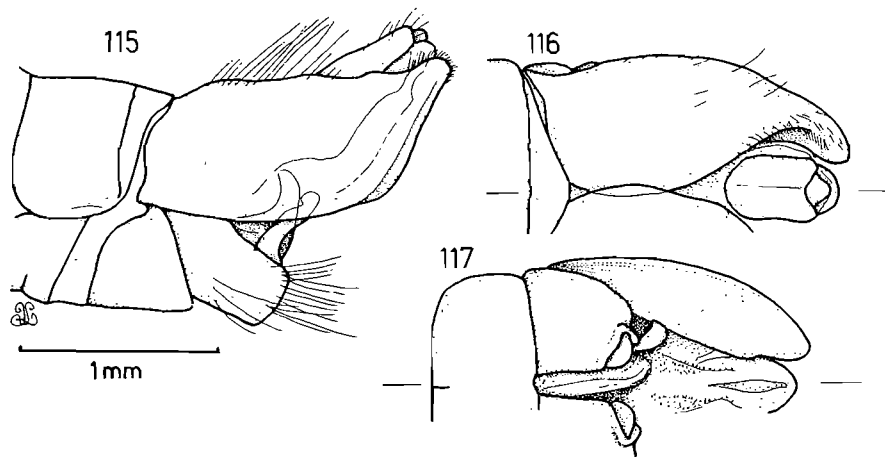
Figs 115–117

Etymology: *L. niveus*—snowy. Refers to the many white setae.

Description: Based on the holotype male.

Head: Antennae black; bristles black except for a few white ones ventrally on scape. Eye:face ratio 1:0,20; eye:lower facial margin ratio 7,7:1. Mystax white in upper part, black in lower part (mixed centrally). Occipital setae: upper—black; central and lower—white.

Thorax: ktg s white (few black); mtanepst s white. Mesonotal setae: acr black, anterior of suture; dc ca 7 pairs black; pprn bare; 3/5 npl (black except for 1 yellow on each side); 2/3 black spal; 3/3 black pal (1–2 rather weak and seta-like). Mane black anteriorly, bordered with small white setae, white posteriorly. Scutellum with 5 black marginal bristles, disc with white setae only. Wing 7,7 × 2,5 mm; membrane transparent and without obvious markings; basal angle of cell r_4 —25°. Legs black, tibiae dark red-brown dorsoproximally; cx1 with white setae anteriorly; cx3 with 1 white bristle laterally. Hind femur with bristles white, long setae white (dorsally) and black (ventrally), short setae white.



Figs 115–117. *Neolophonotus niveus* sp. n. holotype ♂ genitalia. 115. Lateral. 116. Dorsal. 117. Ventral.

Abdomen: Black, silver pruinose. T3 with *ca* 4 white marginal bristles; fine setae long white. S3 with *ca* 6 white bristles and long white setae. ♂ genitalia as in Figs 115–117; epandrium elongate with dorsoproximal lobe rather acute; aedeagus long, thick, with two groups of minute setae ventrally.

Paratypes: 10♂ 8♀, agree well with holotype.

Material examined: NAMIBIA: 1♂ (holotype). 30 km NW of Karasburg (2718DA), 28.viii.1983, J. Londt & B. Stuckenberg, arid Karoo type veget (NM); 7♂ 5♀ (paratypes), Churutabis 108, Bethanien, SE 2717Ad, 4–12.x.1974, H20939 (SMW); 1♂ 1♀ (paratypes), Blinkoog, Warmbad, SE 2719Ca, 14–17.x.1971, H4488, hover near ground among small shrubs (SMW). SOUTH AFRICA: *Cape Province:* 1♂ (paratype), Henkries Valley (2818CC), 12.x.1980, Whitehead (SAM). 1♂ 2♀ (paratypes), Pofadder (2919AB), Bushmanland, x.1939, Mus Staff (SAM). NM Type No. 3355, SAM Type No. 5007, SMW Type No. T700.

Distribution: Desert and Poor Steppe climatic region.

***Neolophonotus occesilitus* sp. n.**

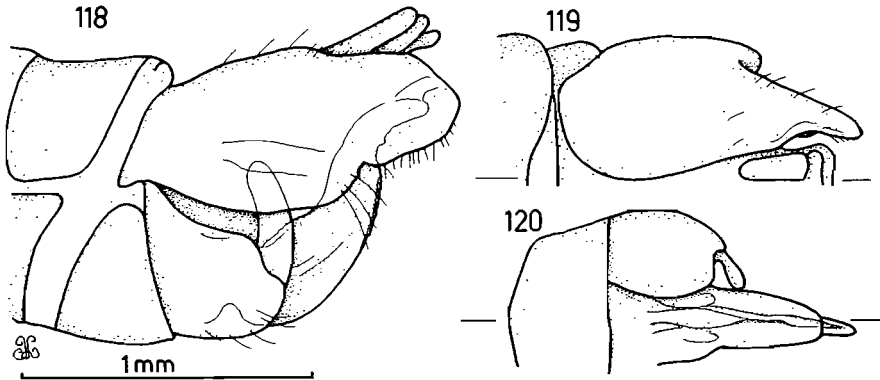
Figs 118–120

Etymology: L. *occesus*—west, *litus*—coast. Refers to the provenance of the types.

Description: Based on the holotype male.

Head: Antennae dark red-brown to black; bristles brown and white. Eye:face ratio 1:0.20; eye:lower facial margin ratio 10,1:1. Mystax white, mixed with black along lower facial margin. Occipital setae: upper—black (1 white); central and lower—white.

Thorax: ktg s and mtanepst s white. Mesonotal setae: acr long dark brown, anterior of suture; dc *ca* 5 pairs dark brown, few anterior of suture; pprn bare; 3/2 yellow npl; 2/2 yellow and black spal; 1/1 black pal. Mane black anteriorly, bordered with small white setae, white posteriorly. Scutellum with 2 black marginal bristles, disc



Figs 118–120. *Neolophonotus occesilitus* sp. n. holotype ♂ genitalia. 118. Lateral. 119. Dorsal. 120. Ventral.

with white setae only. Wing $5,5 \times 1,5$ mm; membrane transparent and without obvious markings; basal angle of cell r_4 — 23° . Legs dark red-brown to black, tibiae yellow-brown proximally; $cx1$ with white setae anteriorly; $cx3$ with 1 white bristle laterally. Hind femur with bristles white, long setae white and brown, short setae white.

Abdomen: Dark red-brown, gold pruinose. T3 with 2 white marginal and 1 white discal bristles; fine setae white except for a few black on dorsal hind margin. S3 with 2 white bristles and long white setae. ♂ genitalia as in Figs 118–120; aedeagus long, thick (especially in lateral aspect) and with a somewhat pointed tip.

Paratype: 1♂, similar to holotype but most setae somewhat yellow.

Material examined: SOUTH AFRICA: *Cape Province*: 2♂ (holotype & paratype), 11mi E. Port Nolloth (2917AC), 6.ix.1972, M. E. & B. J. Irwin, coarse red sand dunes (NM). NM Type No. 3356.

Distribution: Known only from the type-locality in the Desert and Poor Steppe climatic region.

Neolophonotus ochrochaetus Hull, 1967

Figs 121–123

Neolophonotus (Lophopeltis) ochrochaetus Hull, 1967: 274–6.

Neolophonotus ochrochaetus; Oldroyd, 1981: 341.

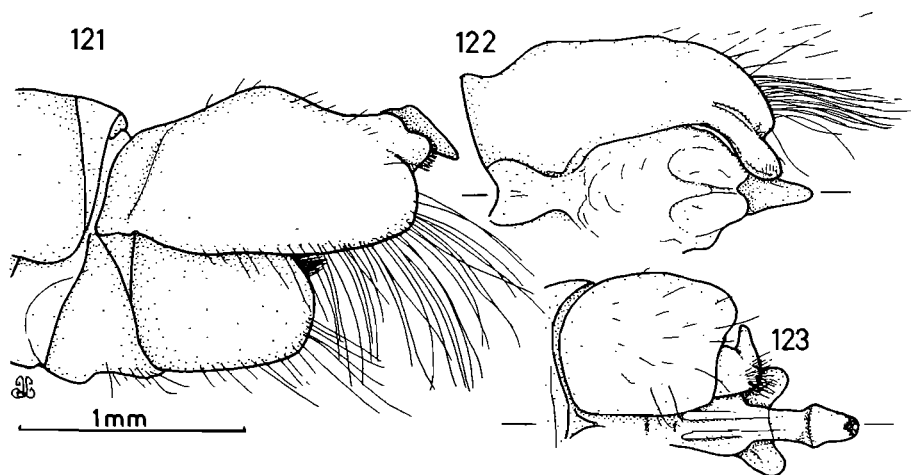
Redescription: Based on the holotype male.

Head: Scape and pedicel dark red-brown; setae dark red-brown ventrally, shortish dark red-brown and white dorsally. Eye:face ratio 1:0,22; eye:lower facial margin ratio 7,2;1. Mystax pale yellow and black mixed (black shorter than yellow), all black on lower facial margin. Occipital setae: upper—long black; central—pale yellow, few black; lower—white.

Thorax: ktg s yellow (1 black); $mtanepst$ s 2 black 1 yellow. Mesonotal setae: acr 1–2 fine black, anterior of suture; dc black, go anterior of suture; $pprn$ bare; $4/3$ black npl (1 yellow on left side); $3/3$ black $spal$; $2/2$ black pal . Mane short dark red-

brown anteriorly (bordered by short white setae), white postsuturally. Scutellum with 6 black marginal bristles, disc with 6 black bristles and 3 groups of white setae. Wing 9.1×2.9 mm; membrane transparent and without obvious markings; basal angle of cell r_4 — 24° . Legs red-brown, femora almost black; cx1 with white setae anteriorly; cx3 with 3 white bristles laterally. Hind femur with bristles pale yellow and dark red-brown, long setae white (few black), short setae minute, white dorsally and laterally, longer black ventrally.

Abdomen: Dark red-brown, fine gold pruinose. T3 with 3–4 black marginal and 3 black discal bristles; fine setae minute white except for black ones dorsally. S3 with ca 6 black bristles and short black and white setae. δ genitalia as in Figs 121–123; epandrium with dorsodistal lobe; aedeagus with lateral wing-like projections.



Figs 121–123. *Neolophonotus ochrochaetus* Hull, 1967 holotype δ genitalia. 121. Lateral. 122. Dorsal. 123. Ventral.

Variation: f similar to male. There is considerable variation in the number and colour of bristles and setae. The δ genitalia provide the best specific characters.

Material examined: SOUTH AFRICA: *Cape Province*: 1 δ (holotype), Swartbergpas, Platberg (3322AC), 5–6.i.1951, Brink & Rudebeck, Swedish St. Af. Exp., Alt. ab. 5000' No. 120 (ZML); 1 δ , Swartberg Pass (3322AC), 27.iii.1974, Whitehead (SAM); 7 δ 14 f , Diepkloof ca 20 km E De Rust (3322BD), 12.xii.1979, Londt & Stuckenberg, dry rocky hillside & stream (NM); 4 δ 11 f , Louterwater (3323DC), 13.xii.1979, Londt & Stuckenberg, grass & hillside macchia (NM); 3 δ 2 f , Meiringspoort (3322BC), 11–12.xii.1979, Londt & Stuckenberg, rocky hillside & stream edge (NM); 1 δ , Meirings Poort, 16.xii.1925, Brauns (NM); 1 δ , Spitzkop, Meirings Poort, i.1935, Museum Staff (SAM); 1 δ , Meirings Poort, 23.x.1938, Mus. Staff (SAM); 13 δ 14 f , 9 km SW Willowmore (3323AD), 30–31.x.1978, Londt & Miller, open Karoo scrub (NM); 4 δ 2 f , 1 km NE Uniondale (3323CA), 31.x.1978, Miller & Londt, rocky hillside scrub (NM); 1 δ , 25 km W Uniondale (3323CA), 31.x.1978, Miller & Londt (NM); 1 δ , 20 km W Humansdorp (3424AB), 2.xi.1978, Miller & Londt, open hillside scrub (NM);

2♂ 1♀, Knysna Heads (N side) (3423AA), 9–10.xii.1979, Londt & Stuckenberg, open hillside grass (NM); 2♂ 3♀, Otterford Forestry Reserve (3325CC) Hankey area, 1–10.xii.1967, B & P Stuckenberg (NM); 1♂, Elandsberg Mts South of Cockscomb Peak, Patensie (3424DB), B & P Stuckenberg (NM); 3♂ 2♀, Prince Alfred Pass summit (3323CC), 11.xii.1979, Stuckenberg & Londt, old lands (NM); 1♂, Modderfontein, Willowmore (3323AD), 19.xii.1921, Brauns (NM); 1♂ 2♀, Willowmore, 10.xi.1906 1.xii.1917 & 18.i.1922, Brauns (NM ZSM); 2♂, Swartkops, P. Elizabeth (3325DC), 20.xii.1922, Brauns (NM); 1♂, Jeffreysbaai (3424BB), xii.1952, Heyns (NM); 2♂ 3♀, Swartebergen (? 3322AA), Prince Albert Div., xi.1935, Mus. Staff (SAM); 7♂ 6♀, The Kloof, Fraserburg Div. (3121DC), xi.1935, Mus. Staff. (SAM); 5♂ 4♀, Oudtshoorn, Zebra (3322CB), x.1951, Mus. Epd. (SAM); 2♂, Rust en Vrede, Oudtshoorn Distr. (3322CA), x.1951, Mus. Exp. (SAM). *Natal*: 1♂, Cathedral Peak area (2829CC), 26–27.xii.1977, Miller, Indigenous forest, Malaise trap (NM); 1♂, Cathedral Peak, Indumeni gorge (2829CC), 19.xii.1979, Lamoral, grassland Protea slope (NM).

Distribution: Widely distributed in the southern Cape Province. The two Natal records seem anomalous but the specimens conform well with the Cape material.

Prey record: A male was collected with its prey (Diptera: Asilidae—a ♂ *Neolophonotus* belonging to the *angustibarbus* species-group).

Neolophonotus pellitus (Wiedemann, 1819)

Figs 124–128

Asilus pellitus Wiedemann, 1819: 34–5; Walker, 1855: 711.

Lophonotus ustulatus Loew, 1858: 364; Loew, 1960: 158–9.

Lophonotus pellitus; Schiner, 1867: 401.

Dysmachus pellitus; Kertész, 1909: 278.

Neolophonotus (Lophopeltis) pellita; Engel, 1927: 175–7.

Neolophonotus (Lophopeltis) pellitus; Hull, 1962: 533.

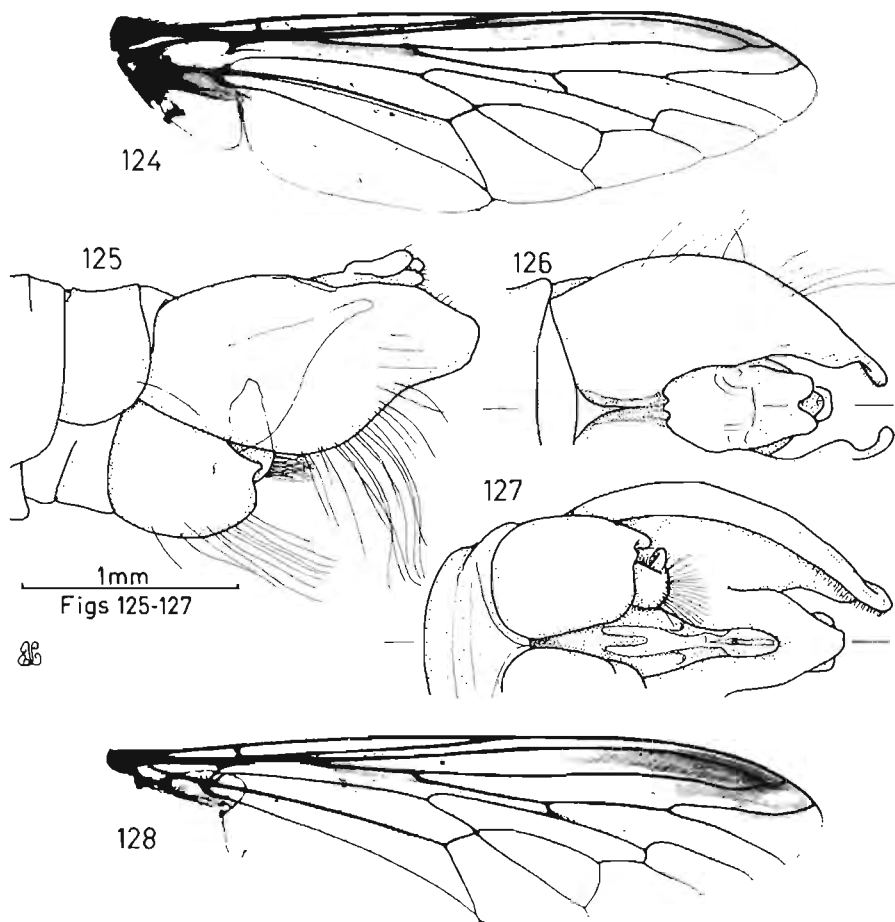
Neolophonotus pellitus; Oldroyd, 1981: 341.

Redescription: Based on the holotype female.

Head: Scape and pedicel dark red-brown; bristles dark red-brown, setae yellow. Eye:face ratio 1:0.25; eye:lower facial margin ratio 6.7:1. Mystax pale yellow, few black on lower facial margin. Occipital setae: upper—long black (few yellow); central—yellow; lower—yellow-white.

Thorax: ktg s and mtanepst s long yellow (accompanied by fine white setae). Mesonotal setae: acr few black, anterior of suture; dc (all broken off) go anterior of suture; pprn bare 3/3 npl black; 2/2 spal (broken off); 2/2 pal (broken off). Mane short black anteriorly (bordered by few yellow setae), posterior setae rubbed off (are white in other specimens). Scutellum with 4 black marginal bristles, disc with 4 bristles and white setae. Wing 8.4×2.9 mm; membrane transparent and without obvious markings (Fig. 124); basal angle of cell r_4 —26°. Legs dark brown; cx1 with white setae anteriorly; cx3 with 3 yellow-white bristles laterally. Hind femur with bristles pale yellow-white, long setae (few) white, short setae minute white.

Abdomen: Dark red-brown, fine gold pruinose. T3 with 4 marginal bristles (3 white, 1 black); fine setae minute, white except for black ones dorsally. S3 with fine yellow and black bristles and white setae.



Figs 124–128. *Neolophonotus pellitus* (Wiedemann, 1819). 124. Wing of holotype ♀. 125–127. Genitalia of Elandsbaai ♂. 125. Lateral. 126. Dorsal. 127. Ventral. 128. Wing of holotype ♀ *ustulatus*.

Variation: ♂ resembles ♀, ♂ genitalia (Elandsbaai ♂ illustrated) as in Figs 125–127. Epandrium fairly elongate and bearing long ventrally directed setae; aedeagus lacking lateral wing-like projections. Variation in the colour of the metanepisternal bristles occurs; they may all be black in some specimens.

Material examined: SOUTH AFRICA: *Cape Province*: 1 ♀ (holotype), Cape Good Hope, Sepb. 1817, Mus. Western (ZMC); 5 ♂ 1 ♀ 20 km SE Ashton (3320CC), 25.ix.1979, Londt, stony hillside with woody vegetation; 1 ♂, Diepkloof ca 20 km E De Rust (3322BD), 12.xii.1979, Londt & Stuckenberg, dry rocky hillside & stream (NM); 1 ♂, Montagu (3320CC), 25.ix.1979, Londt, hillside SE of town; 1 ♂, Montagu, x.1937 (SAM); 1 ♂, Malmesbury (3318BC), 5.x.1925, Brauns (NM); 2 ♂ 2 ♀, Ceres (3319AD), x.1940, Smithers (SAM); 2 ♂ 1 ♀, Ceres Dist., xi.1964, Pretorius (SAM); 1 ♂ 1 ♀ 2?, Mowers, Robertson (3319DD), x.1952, Mus. Exp. (SAM); 5 ♂ 7 ♀, Strandfontein (3419BA), iii.1950, Zinn & Hesse (SAM); 6 ♂ 3 ♀,

Oudtshoorn, Zebra (3322CB), x.1951, Mus. Staff. (SAM); 1♂, Saldanha B. (3317BB), ix.1912, L.P. (SAM); 10♂ 5♀, 7–10 m SW Matjiesfontein (3320BA), 15.x.1966 (SAM); 1♂, Verkeerde Vley (3022AC), x.1937 (SAM); 1♂ 7♀, Verkeerde Vlei, xii.1962, SAM (SAM); 1♂, Matroosberg Sta. (3319BD), xii.1962 (SAM); 1♂, 8 m NE Touws R. (3320AC), xii.1962 (SAM); 1♂, Van Wyks Dorp (3321CB), x.1937 (SAM); 1♂, Bulhoek, Klaver-Clanw (3218BB), x.1950, Mus. Exp. (SAM); 5♂ 2♀, Citrusdal Dist. (3219CA), xi.1948, Mus. Expd. (SAM); 1♂ 3♀, Olifants River bet. Citrusdal & Clanwilliam, x–xi.1931, Mus. Staff (SAM); 1♂ 4♀ 1?, Schoemans Poort (3322AC), x.1938, Mus. Staff (SAM).

Distribution: Recorded from the Mediterranean and Little and Great Karoo climatic regions of southern Africa.

Prey record: Diptera: Syrphidae (1).

Remarks: I accept with reservation the synonymy of *ustulatus* with *pellitus*. The ♀ holotype of *ustulatus* has a darker shaded area at the wingtip (Fig. 128), a shallower lower facial margin (ratio 9,1:1), and dark red-brown ktg s, as well as less obvious differences.

While working with the Macquart collection at the MNP I found a female specimen with the following data—'690', '*Asilus trivittatus*'—bearing a Paris Mus. No. 419. The specimen was clearly intended to represent a new species. I have searched Macquart's published works without finding the description of this species, and must assume that it was not published. The specimen appears to belong to *pellitus*.

***Neolophonotus pollex* sp. n.**

Figs 129–131

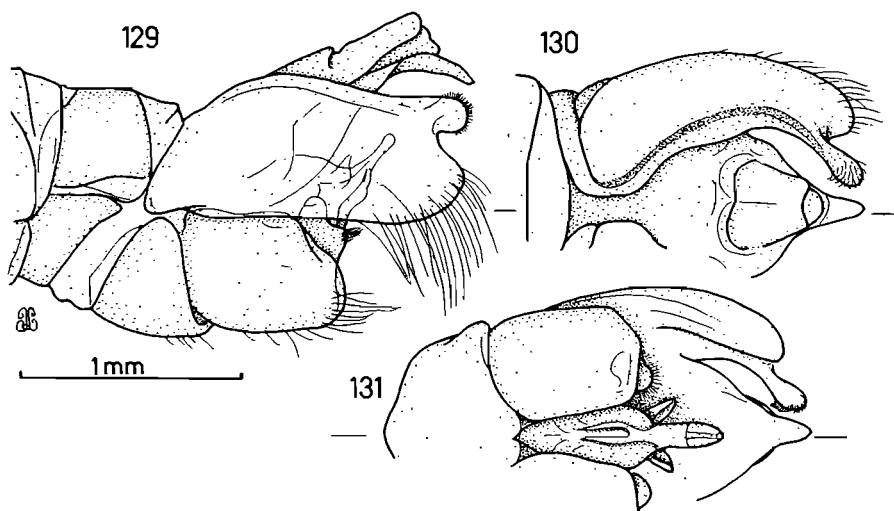
Etymology: L. *pollex*—a thumb or great toe. Refers to the thumb-like process found on the male epandrium.

Description: Based on the holotype male.

Head: Antennal scape and pedicel dark brown, rest dark red-brown; bristles and setae dark red-brown and white (no white on ventral aspect of pedicel). Eye:face ratio 1:0,23; eye:lower facial margin ratio 8,0:1. Mystax black and white (white centrally and along lower facial margin). Occipital setae: upper—black; central—dark red-brown and white; lower—white.

Thorax: ktg s and mtanepst s yellow and white. Mesonotal setae: acr not obvious; dc ca 7 pairs black, extend well anterior of suture; pprn bare; 3/3 black npl; 2/2 black spal; 2/2 black pal. Mane short black anteriorly, white posteriorly. Scutellum with 3 black marginal bristles, disc with 2 black bristles and white setae. Wing 6,5 × 2,2 mm; membrane transparent and without obvious markings; basal angle of cell r₄—23°. Legs: Femora dark red-brown, rest red-brown; cx1 with white setae anteriorly; cx3 with 2 white bristles laterally. Hind femur with bristles dark red-brown and white, long setae shortish white and dark red-brown, short setae white.

Abdomen: Dark red-brown, red-gold pruinose. T3 with 2 black discs and 4–5 black marginal bristles; fine setae white, are some black ones dorsally. S3 with ca 12 dark red-brown bristles and fine white setae. ♂ genitalia as in Figs 129–131



Figs 129–131. *Neolophonotus pollex* sp. n. paratype ♂ genitalia. 129. Lateral. 130. Dorsal. 131. Ventral.

(Papiesfontein paratype illustrated); epandrium elongate with a thumb-like dorsodistal process; aedeagus moderate in size, with rounded apex and a pair of wing-like lateral processes (seen in ventral aspect).

Paratypes: 6♂ 3♀, similar to holotype.

Material examined: SOUTH AFRICA: *Cape Province*: 2♂ (holotype & paratype) 1♀ (paratype), Jeffreys Bay (3424BB) C.P., i.1960, SAM (SAM); 5♂ 2♀ (paratypes), Papiesfontein, Gamtoos Mth. (3325CC), i.1960, SAM (SAM NM). NM Type No. 3357, SAM Type No. 5008.

Distribution: Known only from two localities on the eastern Cape coast.

***Neolophonotus raymondi* sp. n.**

Figs 132–134

Etymology: Named for Raymond Miller who collected the type material.

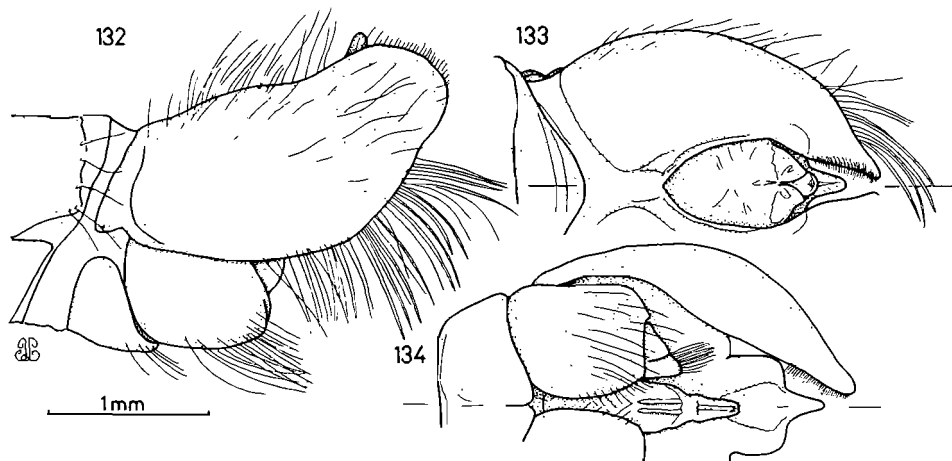
Description: Based on the holotype male,

Head: Antenna black; bristles and setae black and white (no white on ventral aspect of pedicel). Eye:face ratio 1:0,23; eye:lower facial margin ratio 5,3:1. Mystax white with black laterally and along lower facial margin. Occipital setae: upper—black; central—black and yellow; lower—white.

Thorax: ktg s and mtanepst s black. Mesonotal setae: acr black anteriorly; dc ca 6 pairs black, extend well anterior of suture; pprn bare; 3/4 black npl; 3/4 black spal; 2/2 black pal. Mane short black anteriorly (bordered by short white setae), white posteriorly. Scutellum with 4 black marginal bristles, disc with 5 black bristles and white setae. Wing 8,4 × 2,6 mm; membrane transparent and without obvious markings (tip of R_{1+2} slightly shaded); basal angle of cell r_4 —27°. Legs uniform dark red-brown to black; cx1 with white setae anteriorly; cx3 with 2 white bristles

laterally. Hind femur with bristles black and white, long setae shortish white and black, short setae white (few black ventrally).

Abdomen: Dark red-brown, gold pruinose, T3 with few fine black marginal bristles; fine setae white laterally, black dorsally. S3 with 2 black bristles and fine, long black and white setae. ♂ genitalia as in Figs 132–134; epandrium elongate with thick ventrally directed setae; aedeagus moderate in size, with rounded apex.



Figs 132–134. *Neolophonotus raymondi* sp. n. holotype ♂ genitalia. 132. Lateral. 133. Dorsal. 134. Ventral.

Paratype: 1♂, similar to holotype.

Material examined: SOUTH AFRICA: *Cape Province*: 2♂ (holotype & paratype), 10 km E Kamieskroon (3018AA), 17.x.1977, Ray M Miller, 630 m (NM). NM Type No. 3358.

Distribution: Known only from the type-locality in the Desert and Poor Steppe climatic region.

***Neolophonotus salina* sp. n.**

Figs 135–137

Etymology: *L. salina*—a salt-pit. Refers to the type-locality of Soutpan.

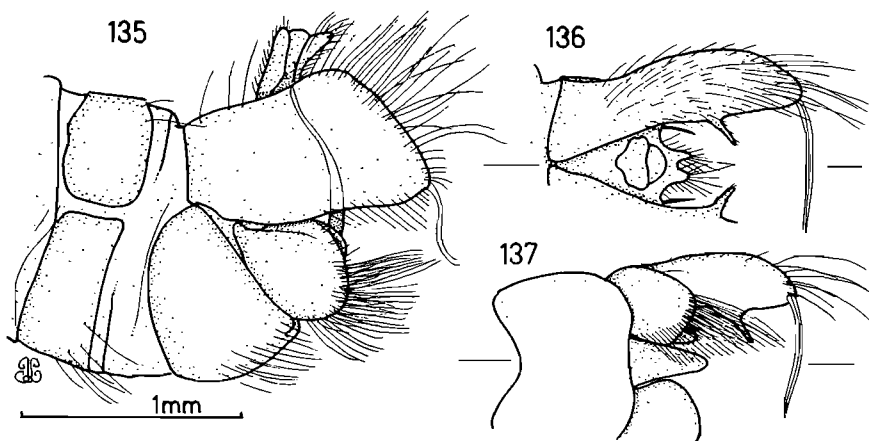
Description: Based on the holotype male.

Head: Antenna dark red-brown, junctions between segments orange-brown; bristles and setae white dorsally, black ventrally. Eye:face ratio 1:0,18; eye: lower facial margin ratio 11,8:1. Mystax black and white (mostly black ventrally and along lower facial margin, white in dorsal parts). Occipital setae: upper—black; central and lower—white.

Thorax: ktg s and mtanepst s pale yellow and white. Mesonotal setae: acr 2 pairs anterior of suture; dc ca 6 pairs black, extend well anterior of suture; pprn bare; 3/3 yellow and black npl; 2/2 black spal; 1/1 black pal. Mane short black anteriorly (bordered by few white setae), white posteriorly. Scutellum with 4 black marginal

bristles, disc with white setae only. Wing $6,0 \times 1,9$ mm; membrane transparent and without obvious markings; basal angle of cell r_4 — 34° . Legs: femora dark red-brown, tibiae orange-brown, tarsi red-brown; cx1 with white setae anteriorly; cx3 with 2–3 white bristles laterally. Hind femur with cream bristles (1–2 black), long setae shortish black and white, short setae white.

Abdomen: Dark red-brown, silver pruinose. T3 with 1 white discal and 2 (1 black, 1 white) marginal bristles; fine setae white laterally, black dorsally. S3 with 5 pale yellow bristles and fine white setae. ♂ genitalia as in Figs 135–137; epandrium with truncate appearance and with small inwardly directed process dorsally; aedeagus elongate; subanale with a single seta on either side (see dorsal aspect).



Figs 135–137. *Neolophonotus salina* sp. n. paratype ♂ genitalia. 135. Lateral. 136. Dorsal. 137. Ventral.

Paratypes: 1♂ 1♀, similar to holotype.

Material examined: SOUTH AFRICA: *Transvaal*: 2♂ (holotype & paratype), Soutpan (2229CD) Soutpansberge, 23–24.ii.1980, J. Londt & L. Schoeman, bushveld vegetation (NM); 1♀ (paratype), 6 km N of Vivo (2229CC), 23–24.ii.1980, Londt & Schoeman, bushveld veget & old lands (NM). NM Type No. 3359.

Distribution: Known only from two localities in the N Transvaal climatic region.

***Neolophonotus sanchorus* sp. n.**

Figs 138–140

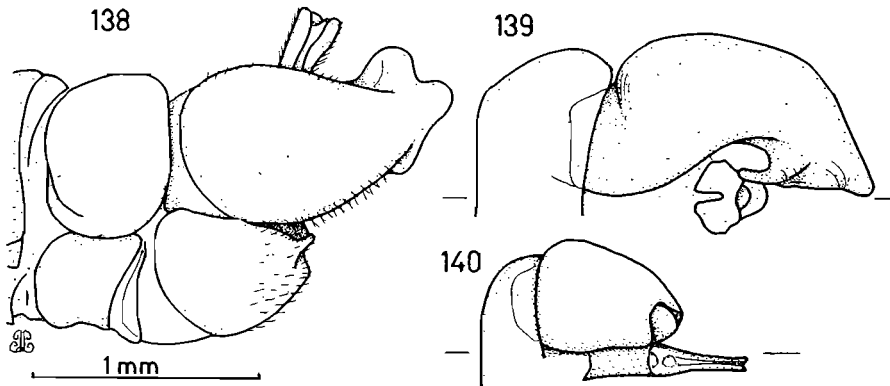
Etymology: Gr. San = Bushman + *choros*—land. Refers to the type-locality in a region called Bushmanland.

Description: Based on the holotype male.

Head: Antennae dark red-brown; bristles and setae dark red-brown (a few white dorsally). Eye:face ratio 1:0,17; eye:lower facial margin ratio 12,2:1. Mystax black and white mixed (mostly white in upper parts, black in lower parts). Occipital setae: upper—black and white; central and lower—white.

Thorax: ktg s and mtanepst s white. Mesonotal setae: acr long black, anterior of suture; dc ca 7 pairs black, extend well anterior of suture; pprn bare; 3/3 pale yellow npl; 2/3 black spal; 2/2 black pal. Mane short black anteriorly, white posteriorly. Scutellum with 3 black marginal bristles, disc with 6 black bristles and white setae. Wing $6,7 \times 2,2$ mm; membrane transparent and without obvious markings; basal angle of cell r_4 — 27° . Legs uniform blackish (tarsi dark red-brown); cx1 with white setae anteriorly; cx3 with 1 white bristle laterally. Hind femur with bristles white (few dark red-brown), long setae white dorsally and dark red-brown ventrally, short setae white.

Abdomen: Dark red-brown, fine silver-gold pruinose. T3 with 4 white marginal bristles (discals absent); fine setae long white laterally, shorter and accompanied by black ones dorsally. S3 with ca 4 white bristles and fine white setae. ♂ genitalia as in Figs 138–140; epandrium with a distal notch (seen in lateral view), and an inwardly directed hook-like process (seen in dorsal view); aedeagus fairly slender.



Figs 138–140. *Neolophonotus sanchorus* sp. n. holotype ♂ genitalia. 138. Lateral. 139. Dorsal. 140. Ventral.

Paratypes: 2♂ 4♀, similar to holotype.

Material examined: SOUTH AFRICA: *Cape Province:* 3♂ (holotype & paratypes) 4♀ (paratypes), Onseepkans (2819CB) nr Orange River Bushmanland, x.1939, Mus. Staff (SAM NM). SAM Type No. 5009, NM Type No. 3360.

Distribution: Known only from the type-locality in the Desert and Poor Steppe climatic region.

Neolophonotus satanus sp. n.

Figs 141–143

Etymology: Heb. *satan*—an enemy, the devil. Refers to the predatory behaviour of the species.

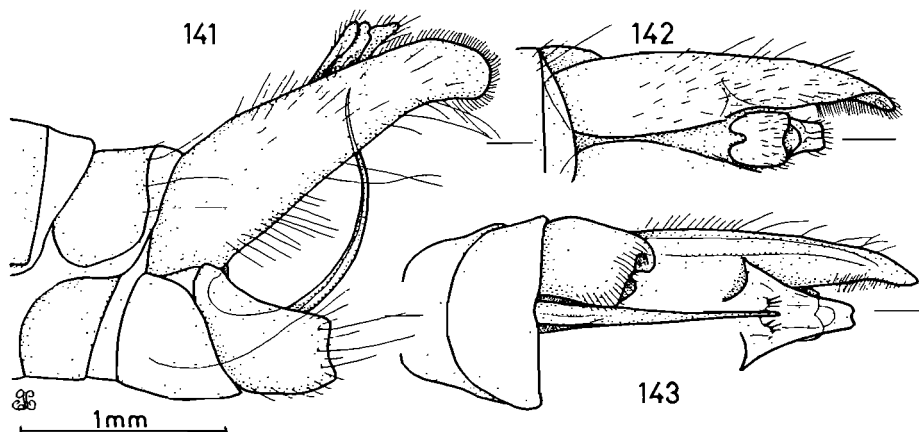
Description: Based on the holotype male.

Head: Antennae black, pedicel a little paler at junctions with other segments; bristles and setae of scape black and white, pedicel with black setae only. Eye:face

ratio 1:0,19; eye:lower facial margin ratio 6,5:1. Mystax white except for black setae along lower facial margin. Occipital setae: upper—black (1 white); central—black and white; lower—white.

Thorax: ktg s and mtanepst s cream. Mesonotal setae: acr black, anterior of suture; dc ca 7 pairs black, extend well anterior of suture; pprn bare; 3/3 yellow npl; 2/2 black spal; 1/1 black pal. Mane black anteriorly (bordered by shorter white setae), white posteriorly. Scutellum with 4 marginal bristles (2 black, 2 white), disc with 2 white bristles and white setae. Wing $6,5 \times 2,2$ mm; membrane transparent and without obvious markings; basal angle of cell r_4 — 45° . Legs dark red-brown, dorsoproximal parts of tibiae brown; cx1 with white setae anteriorly; cx3 with 2–3 white bristles laterally. Hind femur with bristles white (two black apically), long setae black and white, short setae white.

Abdomen: Blackish, silver pruinose. T3 with 2 marginal bristles (black and white), discs not obvious; fine setae white except for a few black ones dorsally. S3 with ca 6 white bristles and fine white setae. δ genitalia as in Figs 141–143; epandrium elongate with slightly downturned tip; aedeagus long, slender, with pointed apex.



Figs 141–143. *Neolophonotus satanus* sp. n. paratype δ genitalia. 141. Lateral. 142. Dorsal. 143. Ventral.

Paratypes: 44 δ 32 ϕ all collected by Londt & Schoeman in 1982, and Londt & Stuckenberg in 1984, similar to holotype.

Material examined: NAMIBIA: 13 δ (holotype & paratypes) 1 ϕ (paratype), 36 km E Windhoek, Road 6/1, $22^\circ30'S:17^\circ22'E$, 17.iii.1984, Stuckenberg & Londt, dry river bed, Acacia savanna/grassland (NM); 1 δ 2 ϕ (paratypes), 10 km E Hochfeld, Rd 99, $21^\circ28'S:17^\circ56'E$, 18.iii.1984, Stuckenberg & Londt, roadside flowers/sand (NM); 5 δ 4 ϕ (paratypes), 26 km N Windhoek Rd 1/6. $22^\circ20'S:17^\circ04'E$, 29.iii.1984, Londt & Stuckenberg, dry stream bed Acacia riparian woodland (NM); 7 δ 7 ϕ , 28 km W Outjo, Road 65, $20^\circ12'S:15^\circ53'E$, 24.iii.1984, Londt & Stuckenberg, mixed bushveld, grass & flowers along road (NM); 1 δ 1 ϕ , Witvlei, hill SW of town, $22^\circ26'S:18^\circ31'E$, 17.iii.1984, Londt & Stuckenberg, Acacias & low shrubs (NM); 3 δ 1 ϕ , 87 km SE Otjiworongo, Rd 57, $21^\circ03'S:17^\circ10'E$, 19.iii.1984,

Stuckenberg & Londt, Acacia woodland with long grass in seed (NM); 4♂ 1♀, Gross Barmen Resort, 22°07'S:16°42'E, 29.ii.1984, Londt & Stuckenberg, roadside grass & dry river bed at camp (NM); 3♂, 22 km S Windhoek, Road 1/5, 22°44'S:17°07'E, 29.iii.1984, Stuckenberg & Londt, scrubland with grass, roadside vegetation (NM); 1♂ 1♀, 28 km E Khorixas, Rd 65, 20°16'S:15°12'E, 24.iii.1984, Londt & Stuckenberg, mixed Mopane woodland (NM); 1♂, 115 km SW Grootfontein, Rd 2512, 20°12'S:17°42'E, 20.iii.1984, Stuckenberg & Londt, woodland with sparse grass between trees (NM); 6♂ 5♀, 15 km NE Grootfontein, J Scribante Skietbaan, Rd 8/2, 19°28'S:18°15'E, 21.iii.1984, Stuckenberg & Londt, grassy road verges (NM); 2♂ 2♀, 26 km N Windhoek, Rd 1/6, 22°20'S:17°04'E, 29.iii.1984, Londt & Stuckenberg, dry stream bed Acacia riparian woodland (NM); 1♂ 1♀, Okahandja—outskirts, 21°59'S:16°37'E, 28.iii.1984, Londt & Stuckenberg, roadside grass (NM); 1♀, Khan River 24 km N Karibib, Rd 2/3, 21°47'S:15°55'E, 27.iii.1984, Londt & Stuckenberg, Acacias/dry river bed (NM); 1♀, 11 km S Windhoek, Rd 1/5, 22°39'S:17°04'E, 29.iii.1984, Stuckenberg & Londt, rocky hillside grass & trees (NM); 1♂, 30 km SE Tsumeb, Rd 72, 19°25'S:17°55'E, 22.iii.1984, Stuckenberg & Londt, mixed woodland & roadside grass (NM); 2♂ 2♀, 60 km NE Outjo, Rd 69, 19°47'S:16°32'E, 23.iii.1984, Londt & Stuckenberg, mixed woodland with large trees (NM); 1♂ 3♀, 48 km W Otavi, Rd 69, 19°35'S:16°55'E, 23.iii.1984, Stuckenberg & Londt, woodland with short grass cover (NM); 1♂ 1♀, 13 km W Otavi, Rd 69, 19°38'S:17°14'E, 23.iii.1984, Londt & Stuckenberg, Acacia thornveld with little grass (NM); 2♂ 1♀, 7 km SW Gross Barmen (2216BA), 24.iv.1983, Stuckenberg & Londt, thornveld (NM); 2♂ 3♀, Okahandja (2116DD), 24.iv.1983, Londt & Stuckenberg, riverine vegetation (NM); 3♂ 3♀, 111 km W Windhoek (2216CC), 22.iv.1983, Stuckenberg & Londt, sparse bush and thornveld (NM); 3♂ 5♀, Aris 30 km S Windhoek (2217CA), 18.iv.1983, Stuckenberg & Londt, thornveld (NM); 1♂ 3♀, 13 km S Windhoek (2217CA), 18.iv.1983, Stuckenberg & Londt, rocky slopes mixed thornveld (NM); 4♂ 5♀, 30 km SW Gross Barmen (2216AB), 24.iv.1983, Stuckenberg & Londt, thornveld (NM); 3♂ 2♀, 25 km W Windhoek (2216DB), 22.iv.1983, Londt & Stuckenberg, thornveld (NM); 1♂ 10♀, 5 km S Windhoek (2217CA), 18.iv.1983, Londt & Stuckenberg, mixed thornveld (NM); 4♂ 10♀, 48 km W Windhoek (2216DA), 22.iv.1983, Stuckenberg & Londt, thornveld in dry river valley (NM); 11♂ 1♀, 5 km S Windhoek (2217CA), 18.iv.1983, Londt & Stuckenberg, mixed thornveld (NM); 1♂ 1♀, Farm Portsmouth 33, Windhoek Distr (2316AB), 14–24.iv.1972, Strydom & Jones (NM); 1♂, Abachaus, Otjivarongo (1814CC), xii.1949, Hobohm (NM); 2♂ 1♀ (paratypes of *gemsbok*), V.-L. Kal. Exp, Gemsbok Pan (?), 23.iv.–5.v.1939 (NM); 1♂ 1♀, Onze Rust 192, Rehoboth (SE2418Ad), 16–18.v.1973, H12978 (SMW); 4♂ 2♀, Windhoek (SE2217Ca), 18–31.iii.1–12.iv. 13–30.iv.1974, H19050 H18153 H18610 (SMW); 1♀, 2.iii.1938, Litch, H11076 (SMW); 4♂ 1♀, Vaalbank 319, Gobabis (SE2318Dd), 19–22.v.1973, H13098 (SMW); 1♂ Rudenau Nord 6, Okahandja (SE2216Bb), 14.iv.1974, H18195 (SMW); 1♀, Arnheim 222, Windhoek (SE2218Ca), 23–27.x.1972, H9663 (SMW); 1♀, Tsotsana, 18 km W Bushmanland, 19°04'S:20°37'E, 14–19.vi.1971, H2341 (SMW); 1♀, Namuskluft 88, Luderitz (SE2716Dd), 20–22.ix.1973, H14599 (SMW); 1♀, Mangetti Quarantine Block 1125, Grootfontein (SE1818Da), 1–

20.vi.1972, H8927 (SMW); 1♀, Bethanis 514, Outjo (SE2016Ad), 8–10.v.1973, H12732 (SMW); 1?, Noachabeb 97, Keetmanshoop (SE2718Ad/Bc), 22–28.iv.1972, H8024 (SMW); 1♂ 1♀, Bellerode Farm, Windhoek 22°30'S:17°12'E, 23.ii. & 9.iii.1975, de Moor (NMZ); 1♂, Zesfontein (1913BA), ii.1925, Mus. Expd. (SAM); 1♀, Otjimbumbé (?), Kunene R., iii.1925, Mus. Expd. (SAM); 5♂ 5♀, Kamanyab (1914DB), iii.1925, Mus. Expd. (SAM); 1♂, Erikson's Drift (?), Kunene R., iii.1923, Mus. Expd. (SAM); 1♂, Kaross (1914AD), 11.1925, Mus. Expd. (SAM); 1♂, Oganjera (1715CC), iii.1923, Mus. Expd. (SAM). BOTSWANA: 6♂, Farmers Brigade, 5 km SE Serowe (SE2226BD), 6.v.1984 iv.1985 iii & iv.1986, Forchhammer, N slope, mercury vapour lamp (NM); 1♂, Maun (1923CD), 21.iii.1974, Nat Mus Bulawayo (NMZ); 1♂ Tsau River, Tsau (2022AB), 30.iii.1974, Nat Mus Bulawayo (NMZ); 1♀, Sepopa (1822CC), 29.iii.1974, Nat Mus Exp (NMZ); 1♂, Goha Hills, S of Chobe-Linyati R. (1824AC), 1.iv.1974, Nat Mus S Rhod (NMZ). SOUTH AFRICA: *Cape Province*: 5♂ 2♀ (paratypes), 35 km W of Kimberley (2824CB), 17.iii.1982, J. Londt & L. Schoeman, Acacias/grass/sand (NM); 2♀ (paratypes), 30 km SW Kuruman (2723CA), 24.iii.1982, Londt & Schoeman, sandy area/few shrubs (NM); 2♂ 3♀ (paratypes), 10 km E Papkuil (2823BD), 25.iii.1982, Londt & Schoeman, dry stony area/low trees (NM); 1♂ 7♀ (paratypes), 60 km W Kimberley (2824CA), 25.iii.1982, Londt & Schoeman, Acacias/grass/sand (NM); 7♂ 5♀ (paratypes), Hill nr Olifantshoek (2722DC), 24.iii.1982, Londt & Schoeman, rocky hillside grass & Acacia trees (NM); 8♂ 6♀ (paratypes), ca 5 km W Hotazel (2722BB), 23.iii.1982, Londt & Schoeman, Acacias/grass/shrubs (NM NMB); 1♂ (paratype), ca 10 km SE Hotazel (2723AC), 23.iii.1982, Londt & Schoeman, rocky area/big shrubs (NM). NM Type No. 3361.

Distribution: Widespread in the Desert and Poor Steppe, Botswana and N Namibia, and S and N Steppe climatic regions.

Prey Records: Orthoptera—Acrididae (1); Hemiptera, Heteroptera—Lygaeidae (1), nymph (1); Diptera—Asilidae (2) (a ♂ and a ♀ feeding on 2♂ of the same species); Coleoptera—Curculionidae (1).

Remarks: *N. satanus* is closely related to *gemsbock* and *marshalli* but has distinctive ♂ genitalia.

Neolophonotus setiventris (Loew, 1858)

Figs 144–146

Lophonotus setiventris Loew, 1858: 365; Loew, 1960: 163.

Dysmachus setiventris; Kertész, 1909: 280.

Neolophonotus (Lophopeltis) setiventris; Engel, 1927: 178–9; Hull, 1962: 533.

Neolophonotus setiventris; Oldroyd, 1981: 341.

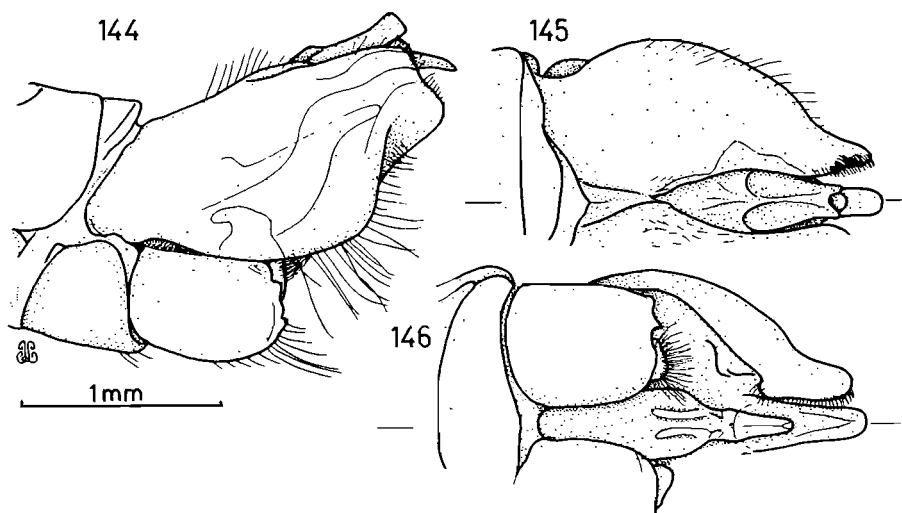
Redescription: Based on the holotype female.

Head: Antennae dark red-brown to black; bristles and setae all dark red-brown. Eye:face ratio 1:0.23; eye:lower facial margin ratio 5.7:1. Mystax pale yellow, few black on lower facial margin. Occipital setae: upper—long black (1 yellow); central—yellow (few black dorsally); lower—white.

Thorax: ktg s and mtanepst s long yellow (accompanied by fine white setae). Mesonotal setae: acr not evident; dc go anterior of suture; pprn bare; 3/3 black npl;

3/3 black spal; 2/2 black pal. Mane short black anteriorly, posterior setae white. Scutellum with 4 black marginal bristles, disc with 4 bristles and few white setae. Wing $7,1 \times 2,5$ mm; membrane transparent and without obvious markings; basal angle of cell r_4 — 23° . Legs dark brown, femora almost black; $cx1$ with white setae anteriorly; $cx3$ with 2–3 white bristles laterally. Hind femur with bristles black and white, long setae few white, short setae tiny white.

Abdomen: Dark red-brown, fine silver pruinose. T3 with 4 black marginal bristles; fine setae tiny black except for a few white ones laterally. S3 with *ca* 8 white and black bristles and white setae.



Figs 144–146. *Neolophonotus setiventris* (Loew, 1858), 7 Weeks Poort ♂ genitalia. 144. Lateral. 145. Dorsal. 146. Ventral.

Variation: ♂ similar to ♀. ♂ genitalia (7 Weeks Poort ♂ illustrated) as in Figs 144–146. Epandrium fairly elongate and bearing long, ventrally-directed setae; aedeagus lacking lateral wing-like projections.

Material examined: SOUTH AFRICA: 1 ♀ (holotype), Cap B Sp, Tollin, 10227 (ZMB); 1 ♂, 7 Weeks Poort Berg (? Seweweekspoort 3321AD), Ladismith, 23–31.xii.1928, Barnard, 5500–7000 ft (SAM); 1 ♂, Swartberg Pass (3322AC), P Albert Div, xi.1929, Barnard, 5000–6000 ft (SAM).

Distribution: Known only from the Little and Great Karoo region.

Remarks: The holotype has no clear locality data. I consider that these 2 ♂ specimens are correctly identified as *setiventris*, and I therefore designate Seweweekspoort as the type-locality.

***Neolophonotus sinuvena* sp. n.**

Figs 147–150

Etymology: L. *sinuo*—bent, *vena*—vein. Refers to the characteristic bends in wingveins R_{2+3} and R_4 .

Description: Based on the holotype male.

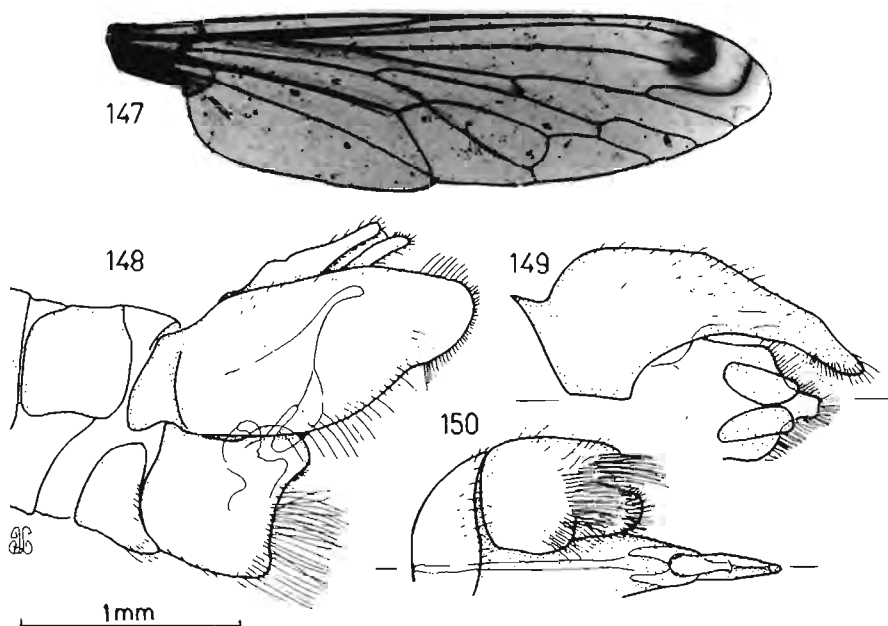
Head: Antennae dark red-brown to black, distal ends of scape and pedicel orange-brown; bristles black and white (no white ventrally on pedicel). Eye:face ratio 1:0,19; eye:lower facial margin ratio 8,0:1. Mystax cream with white borders. Occipital setae: upper—black and pale yellow; central—pale yellow; lower—white.

Thorax: ktg s and mtanepst s yellow. Mesonotal setae: acr black anterior to suture; dc ca 7 pairs black, anterior of suture; pprn bare; 3/3 yellow npl; 2/3 yellow and black spal; 2/2 black pal. Mane weak black anteriorly, bordered with small white setae, white posteriorly. Scutellum with 4 black marginal bristles, disc with 4 black bristles and white setae. Wing $6,2 \times 1,9$ mm; venation (Fig. 147) with characteristic bends in R_{2+3} and R_4 , membrane transparent, with margins of bent veins brownish; basal angle of cell r_4 — 39° . Legs: Femora dark red-brown to black, rest orange-brown to red-brown; cx1 with white setae anteriorly; cx3 with 3–4 white bristles laterally. Hind femur with all bristles and setae white.

Abdomen: Dark red-brown, red-gold pruinose. T3 with 3 white marginal and 3–5 white discal bristles; fine setae white except for a few black on dorsal hind margin. S3 with 6 white bristles and long white setae. ♂ genitalia as in Figs 148–150 (Verkeerde Vlei ♂ paratype illustrated); epandrium elongate, with numerous fine setae distally; aedeagus tapering to a fairly acute tip.

Paratypes: 15♂ 6♀, similar to holotype.

Material examined: SOUTH AFRICA: *Cape Province*: 1♂ (holotype) 1♂ 1♀,



Figs 147–150. *Neolophonotus sinuvena* sp. n. 147. Wing of holotype ♂. 148–150. Paratype ♂ genitalia. 148. Lateral. 149. Dorsal. 150. Ventral.

Bloutoring (3320AD) Sta., 30 m E of Touws R, xii.1962, SAM (SAM); 8♂ 5♀ (paratypes), 18 m E Touws R. to Hondewater, xii.1962, SAM (SAM NM); 1♂ (paratype), Verkeerde Vlei (3022AC), xii.1962, SAM (SAM); 1♂ (paratype), Constable (2523CD), xii.1962 SAM (SAM); 1♂ (paratype), 8 m NE of Touws R (3321CA), xii.1962, SAM (NM); 1♂ (paratype), Matroosberg Sta. (3319BC), xii.1962, SAM (SAM); 1♂ (paratype), Moordenaars Karoo Swanepoel (? Swanepoelshoek 3223CC), x.1952, Mus. Exp. (SAM); 1♂ (paratype), Oorlogskloof Nieuwoudtville (3119AC), 27.x.1978, Whitehead (SAM). SAM Type No. 5010, NM Type No. 3362.

Distribution: The species has a wide geographic range, occurring in the Mediterranean, Little & Great Karoo, Desert & Poor Steppe and S & N Steppe climatic regions.

Neolophonotus spiniventris (Loew, 1858)

Figs 151–156

Lophonotus spiniventris Loew, 1858: 365; Loew, 1960: 160–1.

Dysmachus spiniventris; Kertész, 1909: 280.

Neolophonotus (*Lophopeltis*) *spiniventris*; Engel, 1927: 179, Hull, 1962: 533.

Neolophonotus spiniventris; Efflatoun, 1934: 79–81 (nec. Loew, 1858), Oldroyd, 1981: 341.

Lophopeltis spiniventris; Engel & Cuthbertson, 1934: 40.

Neolophonotus (*Lophopeltis*) *mamathesiana* Bromley, 1947: 117, **syn. n.**

Neolophonotus mamathesiana; Oldroyd, 1981: 340.

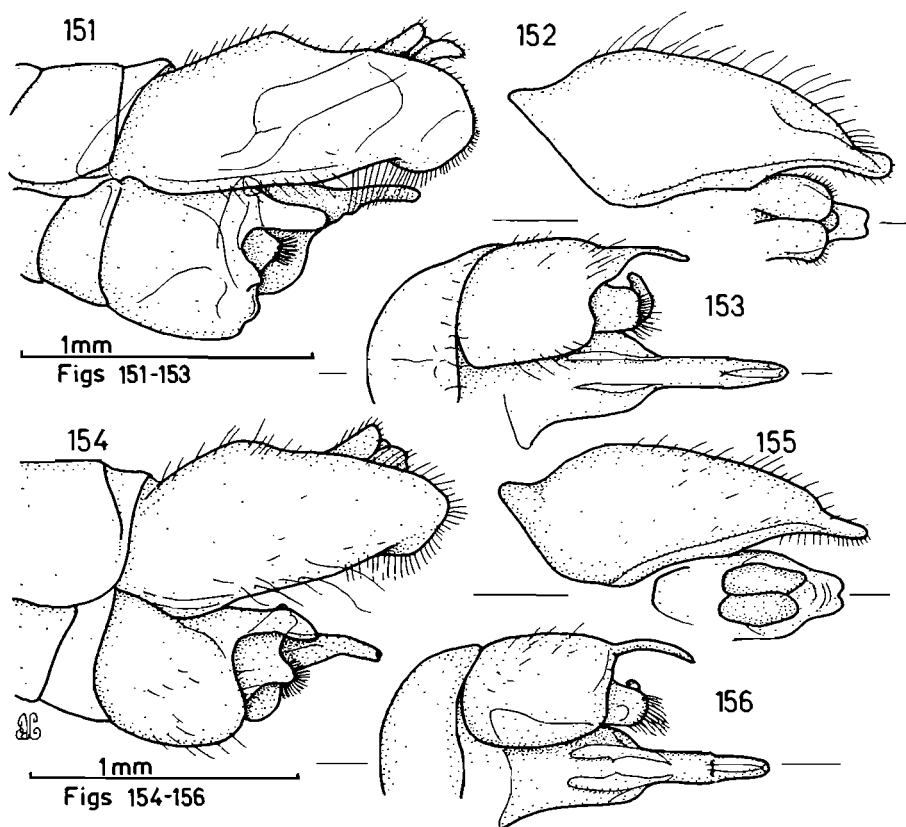
Redescription: Based on the holotype male.

Head: Antennae dark red-brown; bristles and setae dark red-brown except for a few white ones ventrally on pedicel. Eye:face ratio 1:0.22; eye:lower facial margin ratio 9.3:1. Mystax white. Occipital setae: upper—long yellow-white; central—yellow-white; lower—white.

Thorax: ktg s and mtanepst s pale yellow (accompanied by fine white setae). Mesonotal setae: acr ca 6 dark red-brown, anterior of suture; dc yellow behind suture, dark red-brown anterior of suture; pprn bare; 4/3 yellow npl; 2/2 yellow spal; 2/2 yellow pal. Mane short black anteriorly (bordered by white setae), white posteriorly. Scutellum with 6 yellow marginal bristles, disc with 4 yellow bristles and white setae. Wing 5.6 × 1.9 mm; membrane transparent and without obvious markings; basal angle of cell r_4 —21°. Legs dark red-brown; cx1 with white setae anteriorly; cx3 with 3 white bristles laterally. Hind femur with bristles pale yellow, long and short setae white.

Abdomen: Dark red-brown, fine gold pruinose. T3 with 4 yellow-white marginal and 1 yellow-white discal bristles, fine setae white. S3 with ca 8 white bristles and white setae. ♂ genitalia as in Figs 151–153; epandrium fairly elongate; gonocoxite with thin dorsal flange-like projection (seen in lateral aspect); aedeagus lacking lateral wing-like projections.

Material examined: 1♂ (holotype), '75', '303', '384/80' (NRS). SOUTH AFRICA: *Cape Province:* 1♂, Cape Town (3318CD) (ZSM); 3♂ 3♀, Cradock, Fish River (3225BA), 28.x.1978, Londt & Miller, river bank (NM); 1♀, Heuningklip River 25 km W Queenstown (3126DC), 27.x.1978, Miller & Londt, river bank (NM); 5♂ 2♀, Rhodes area (3027DD), 9–10.i.1979, Londt & Stuckenberg, banks of



Figs 151–156. *Neolophonotus spiniventris* (Loew, 1858). 151–153. Holotype ♂ genitalia. 151. Lateral. 152. Dorsal. 153. Ventral. 154–156. Holotype ♂ *mamathesiana* genitalia. 154. Lateral. 155. Dorsal. 156. Ventral.

river + hill near town (NM); 1♂, Wit River Valley, Cambria area, Patensie Dist (3324DA), 6.xii.1967, Stuckenberg (NM); 3♂ 2♀, 16mi E of Cradock, Farm 'Who can tell' (3225BB), 11.iii.1972, Irwin, 1000 m (NM); 1♂ 1♀, Mountain Zebra Nat P. (3225AB) 24 km W of Cradock, 21.i.1984, Barraclough, rocky hillside (NM); 3♂ 3♀, Mountain Zebra Nat. Park (3225AD), 17–21.xii.1985, Londt, bushveld vegetation (NM); 1♂, Murraysburg (3123DD), xi.1935, Mus Staff (SAM); 4♂ 5♀, Burghersdorp (3026CD), xi.1939, Mus Staff (SAM); 1♂, Aberdeen (3224AC), xi.1935, Mus Staff (SAM); 3♂ 1♀, Niekerkshoop (2922BD) Griqualand West, x.1939, Mus Staff (SAM); 5♂ 5♀, Murraysburg Dist, xi.1935, Mus Staff (SAM); 4♂ 3♀ ??, Murraysburg, xi.1935, Mus Staff (SAM); 2♂, Steynsburg Dist (3125BD), x.1935, Mus Staff (SAM); 2♂ 2♀, Colesberg (3025CA), xi.1939, Mus Staff (SAM); 1♂, Dreunberg, Burghersdorp (3026CD) Albert Dist., xi.1939, Mus Staff (SAM); 1♂, Warrenton (2824BB), x.1939, Mus Staff (SAM); 1♂, Rosemead (3125AC), 18.x.1925, Hutton (NCI). *O.F.S.*: 1♂, Smithfield O.E.C. (3026BA), 1909, Kannemeyer (SAM); 1♂, Edenburg (2925DB), 15.xii.1977, Herrmann (NM); 7♂ 2♀, Caledon R bet Bethulie-Aliwal North (3026CB), x.1935, Mus Staff

(SAM); 1♂, Tiparary on Uitdraai 415, Fauresmith (SE 2925Ac), 18–20.xi.1981, Louw Gaaje & Mosala (NMB); Modderpoort (2927AB), 30.x.1914 (NCI); 1♀, Bloemfontein, (2926AA), 10.iv.1918 (NCI); 1♀, Bloemfontein, 20.x.1920, Irving (NCI); 1♂, Bothaville (2726BC), 27.x.1898, Brauns (ZSM). *Transvaal*: 1♂, Potch (= Potchefstroom 2627CA), 22.xii.1942, V. Heerden (NM); 1♂, 10 km N of Middelburg (2529CB), 23.i.1978, Londt, open grass (NM); 2♂, De la Rey (2627BB), i.1919, Brauns (NM); 2♂, Groenkloof (Pretoria suburb 2528CA), 16.xi.1921, Roberts (NM); 4♂ 2♀, Cycad Trail Dist. Middelburg (2529CD), 5.i.1983, Elferink (NM); 9♂ 3♀ 1?, Middelburg Div, xi.1935, Mus Staff (SAM); 2♂ 1♀, Geelhout Kop 24°17'S:28°24'E, 10.xii.1979, Nat Mus Falc Col Exp (NMZ); 1♀, Johannesburg (2628AA), 16.xii.1917, Munro (NCI); 1?, Kempton Park (2628AA), 16.x.1926, Munro (NCI). *TRANSKEI*: 2? Cacadu River nr. Lady Frere (3127CA), 27.x.1978, Londt & Miller, river bank (NM). *LESOTHO*: 1♂ (holotype—*mamathesiana*), Mamathes (2927BB), Basutoland, 19.xi.1945, L. Bevis (DM); 1♀ (paratype—*mamathesiana*), same data but 17.xi.1945 (DM); 4♂ 2♀, same data but 1–9.i.1953 (DM); 1♂, Pulane nr Mateka, 5.i.1954, Bevis (DM); 1♂ 5♀, Roma Mission, Maseru Dist. (2927BC), 4–13.i.1963, Stuckenberg, valley floor old lands, 5500 ft (NM); 1♂, Teyateyaneng (2927BA), xii.1964, Jacot-Guillarmod (AM). *BOTSWANA*: 1♂, Molepolole 6 km SE on Kanye Rd, Kweneng District (SE 2425Bc), 21–23.iv.1982, Louw (NMB).

Distribution: A widely distributed species in southern Africa (Table 1).

Remarks: Although the holotype lacks locality data I am convinced that it must have come from the Cape Province of South Africa as it resembles closely other material from there.

I have not seen all of Bromley's *mamathesiana* types. Apart from those listed above, Bromley mentions a ♀ 'allotopotype' and 1♂ 1♀ 'paratopotypes', and I assume these are also in the DM. I present illustrations of the holotype ♂ genitalia (Figs 154–156) for comparison with the holotype of *spiniventris*.

Efflatoun (1934) lists *spiniventris* as an Egyptian species. I have not seen any of his material but strongly doubt the identification. Bezzi's species, *leucotaenia*, may in fact be the species seen by Efflatoun. Further collecting is required to confirm this.

***Neolophonotus spoliator* sp. n.**

Figs 157–159

Etymology: *L. spoliator*—plunderer or robber. Refers to the predatory habit of the Asilidae.

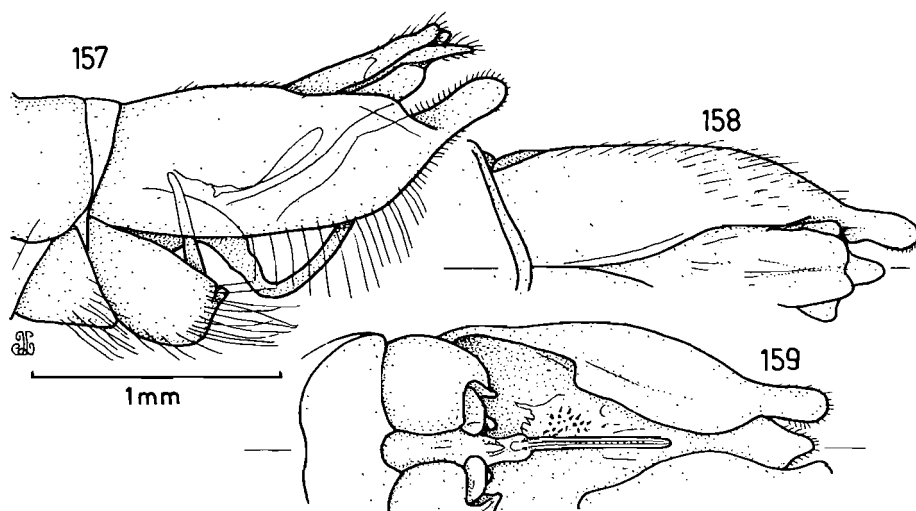
Description: Based on the holotype male.

Head: Antennae dark red-brown; bristles dark red-brown and white on scape, pedicel with dark red-brown setae ventrally and white setae dorsally. Eye:face ratio 1:0.20; eye:lower facial margin ratio 8.3:1. Mystax white, black along lower facial margin. Occipital setae: upper—black; central and lower—white.

Thorax: ktg s and mtanepst s white. Mesonotal setae: acr black, anterior of suture; dc ca 6 pairs black, extend well anterior of suture; pprn bare; 3/3 black npl; 2/2

black spal; 1/1 black pal. Mane black anteriorly (bordered with small white setae), white posteriorly. Scutellum with 4 black marginal bristles, disc with white setae only. Wing $5,3 \times 1,7$ mm; membrane transparent and without obvious markings; basal angle of cell r_4 — 25° . Legs dark red-brown, metatarsi with very few white setae (stand out as being different from other segments); cx1 with white setae anteriorly; cx3 with 3 white bristles laterally. Hind femur with bristles white and black, long setae white and black, short setae white.

Abdomen: Black, silver pruinose, T3 with 2 black and white marginal and 2–3 white discal bristles; fine setae white except for a few black on dorsal hind margin. S3 with 5 white bristles and white setae. δ genitalia as in Figs 157–159 (δ paratype illustrated); epandrium elongate with attenuated tip; aedeagus long, with upturned, narrow distal part; gonostylus elongate and pointed.



Figs 157–159. *Neolophonotus spoliator* sp. n. paratype δ genitalia. 157. Lateral. 158. Dorsal. 159. Ventral.

Paratype: 6 δ 10 ϕ , similar to holotype. The 2 δ collected by Whitehead are a little bigger (eg Aurus δ wing length 7,7 mm) than the other types. Their genital structure, however, does not differ.

Material examined: NAMIBIA: 5 δ (holotype & paratypes) 6 ϕ (paratypes), 5 km E of Aus (2616CB), 30.viii.1983, Londt & Stuckenberg, open veld with low green grass & shrubs (NM); 3 ϕ (paratypes), 3 km E of Luderitz: Golf Club (2615CA), 31.viii.1983, Londt & Stuckenberg, arid rocky slopes (NM); 1 δ (paratype), Klinghardt Mt (2715BC), 24.x.1977, Whitehead (SAM); 1 δ (paratype), Aurus (2716CA), 25.x.1977, Whitehead (SAM). SOUTH AFRICA: *Cape Province*: 1 ϕ (paratype), 13 km E Port Nolloth (2917AC), 3.ix.1983, Stuckenberg & Londt, westcoast strandveld (NM). NM Type No. 3363, SAM Type No. 5011.

Distribution: Known only from the Desert and Poor Steppe climatic region.

Prey record: Diptera—Calliphoridae (1).

***Neolophonotus struthaulon* sp. n.**

Figs 160–162

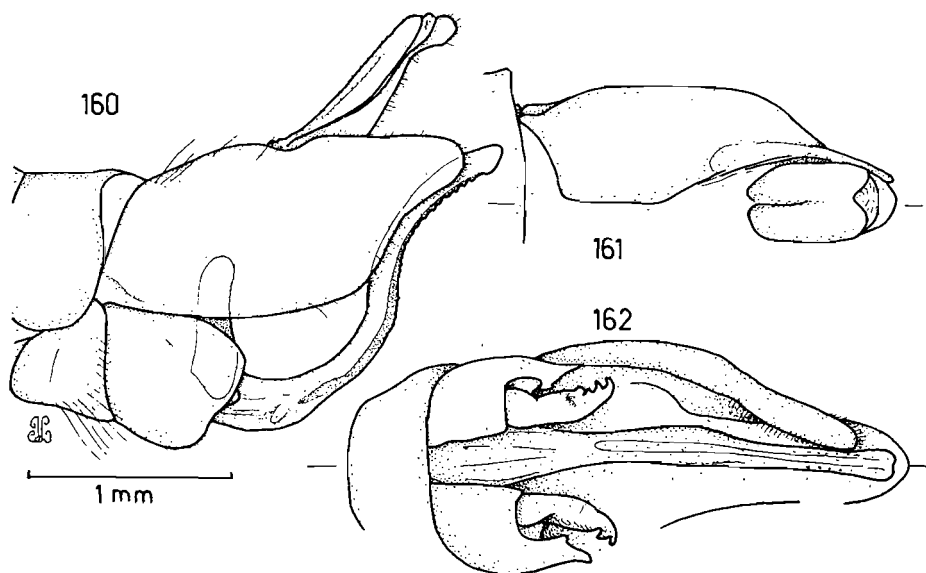
Etymology: Gr. *struthos*—ostrich, *aulon*—gorge. Refers to the type-locality of Vogelstrausskluft, German for 'ostrich-gorge'.

Description: Based on the holotype male.

Head: Antennae dark red-brown; bristles and setae black and white. Eye:face ratio 1:0,23; eye:lower facial margin ratio 8,3:1. Mystax white (1–2 black along lower facial margin). Occipital setae: upper—black and yellow; central—yellow; lower—white.

Thorax: ktg s and mtanepst s white. Mesonotal setae: acr long black, well developed, anterior of suture; dc ca 7 pairs black, extend well anterior of suture; ca 3 tiny white pprn (bare in some of the other specimens); 4/3 yellow npl; 2/2 yellow and black spal; 2/2 yellow (1 black) pal. Mane black anteriorly, bordered with small white setae, white posteriorly. Scutellum with 3 pale yellow marginal bristles, disc with 3 pale yellow bristles and white setae. Wing $7,2 \times 2,5$ mm; membrane transparent and without obvious markings; basal angle of cell r_4 — 28° . Legs dark red-brown, pro- and mesothoracic tibiae and tarsi red-brown; cx1 with white setae anteriorly; cx3 with 2 white bristles laterally. Hind femur with all bristles and setae white.

Abdomen: Black, silver pruinose. T3 with 6 white marginal and 1 white discal bristles; fine setae long white. S3 with 4 white bristles and long white setae. ♂ genitalia as in Figs 160–162 (♂ paratype illustrated); epandrium elongate; aedeagus long, thick, sinuous and with small serrations ventrodistally; gonostylus longish and broad, with 3 small dentate projections distally (seen in ventral aspect).



Figs 160–162. *Neolophonotus struthaulon* sp. n. paratype ♂ genitalia. 160. Lateral. 161. Dorsal. 162. Ventral.

Paratype: 3♂ 3♀, similar to holotype.

Material examined: NAMIBIA: 4♂ (holotype & paratypes) 4♀ (paratypes), Vogelstrausskluft 87, Bethanien (SE 2717Ba), 24–29.ix.1974, H20537 H20538 H20539 & H20540 (SMW NM). SMW Type No. T701, NM Type No. 3364.

Distribution: Known only from the type-locality in the Desert and Poor Steppe climatic region.

***Neolophonotus umbrivena* sp. n.**

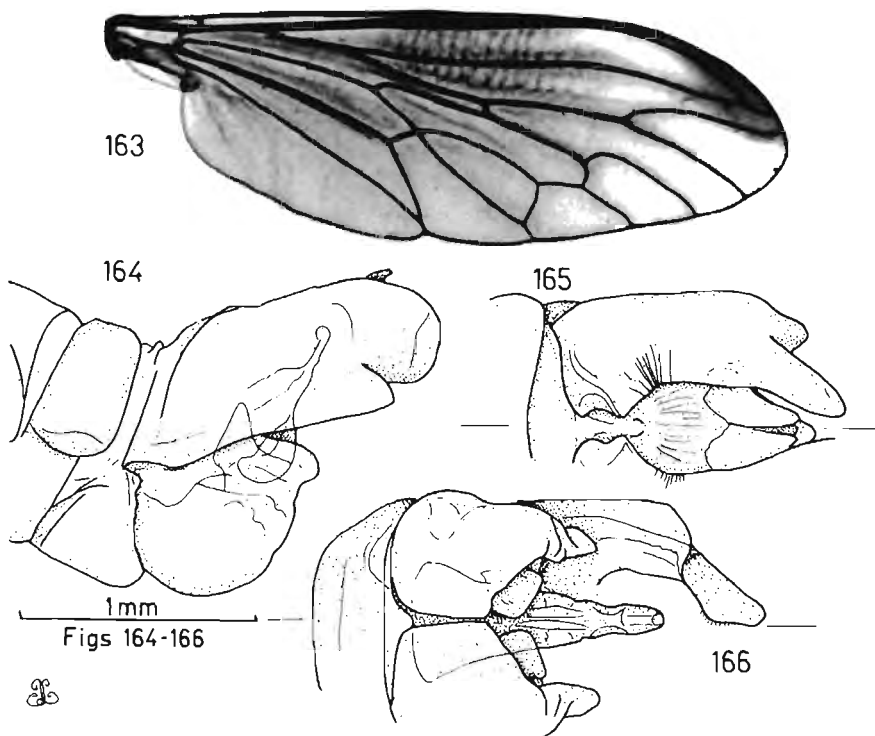
Figs 163–166

Etymology: L. *umbra*—shadow, *vena*—vein. Refers to the darkly shaded wing veins.

Description: Based on the unique holotype male.

Head: Antennae dark red-brown; bristles of scape black and white, of pedicel all black. Eye:face ratio 1:0,26; eye:lower facial margin ratio 5,7:1. Mystax pale yellow with a few black along lower facial margin. Occipital setae: upper—black; central—pale yellow and black; lower—white.

Thorax: ktg s and mtanepst s pale yellow. Mesonotal setae: acr long black, anterior of suture; dc ca 7 pairs black, extend well anterior of suture; pprn bare; 3/3 black



Figs 163–166. *Neolophonotus umbrivena* sp. n. ♂ holotype. 163. Wing. 164–166. Genitalia. 164. Lateral. 165. Dorsal. 166. Ventral.

npl; 2/2 black spal; 2/2 black and yellow pal. Mane black anteriorly, white posteriorly. Scutellum with 2 black marginal bristles, disc with 1 black and 1 white bristles and white setae. Wing $7,2 \times 2,6$ mm; anterior cells somewhat expanded; wing membrane brown-stained (Fig. 163); basal angle of cell r_4 — 20° . Legs uniform dark red-brown to black; cx1 with pale yellow setae anteriorly; cx3 with 1 white bristle laterally. Hind femur with bristles white, long setae black and white, short setae white, long black ventrally.

Abdomen: Dark red-brown to black, red-gold pruinose. T3 with white setae only. S3 with 2 white bristles and long white setae. δ genitalia as in Figs 164–166; epandrium with ventrolateral lobe distally; aedeagus moderately long, fairly stout, and with a somewhat rounded tip.

Material examined: SOUTH AFRICA: *Cape Province*: 1 δ (holotype), 8 km N of Citrusdal (3219CA), ix.1961, SAM (SAM). SAM Type No. 5012.

Distribution: Known only from the type-locality in the Mediterranean climatic region.

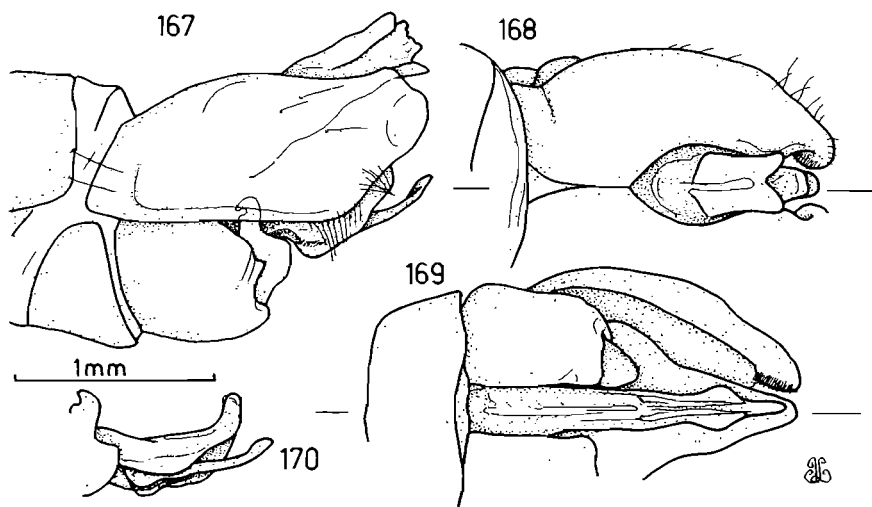
***Neolophonotus unicalamus* sp. n.**

Figs 167–170

Etymology: *L. unus*—one, *calamus*—reed. Refers to the type-locality of Een Riet (Afrikaans for 'One Reed').

Description: Based on the holotype male.

Head: Antennae dark red-brown; bristles black and white (white only on ventral aspect of scape and dorsal aspect of pedicel). Eye:face ratio 1:0,23; eye:lower facial margin ratio 7,6:1. Mystax pale yellow-white with a few black along lower facial margin. Occipital setae: upper—black; central—dark red-brown and white; lower—white.



Figs 167–170. *Neolophonotus unicalamus* sp. n. holotype δ genitalia. 167. Lateral. 168. Dorsal. 169. Ventral. 170. Aedeagus.

Thorax: ktg s and mtanepst s pale yellow. Mesonotal setae: acr present but broken; dc ca 7 pairs black, extend well anterior of suture; pprn bare; 3/3 yellow npl; 2/2 yellow (1 black) spal; 1/1 yellow (accompanied by few well-developed setae). Mane dark red-brown anteriorly (bordered by shorter white setae), white posteriorly. Scutellum with 6 yellow marginal bristles, disc with white setae only. Wing $8,5 \times 2,5$ mm; membrane transparent and without markings; basal angle of cell r_4 about 22° (tip slightly damaged). Legs: Femora dark red-brown, tibiae and tarsi red-brown; cx1 with white setae anteriorly; cx3 with 1 white bristle laterally. Hind femur with bristles cream, long setae black and white, short setae white, few black ventrally.

Abdomen: Dark red-brown, gold pruinose. T3 with 5 white marginal bristles and short white setae. S3 with 4 white bristles and white setae. ♂ genitalia as in Figs 167–170; epandrium with group of small tightly packed setae on internal surface of tip; aedeagus moderately long, the tip having a hood-like projection dorsally.

Paratype: 1♀, similar to holotype.

Material examined: SOUTH AFRICA: *Cape Province:* 1♂ (holotype) 1♀ (paratype), Bushmanland, Een Riet (? Eenrietberg—2917BB), x.1911, Lightfoot (SAM ZSM). SAM Type No. 5013.

Distribution: Known only from the type-locality believed to be in the Desert and Poor Steppe climatic region.

Neolophonotus vansoni Bromley, 1936

Figs 171–174

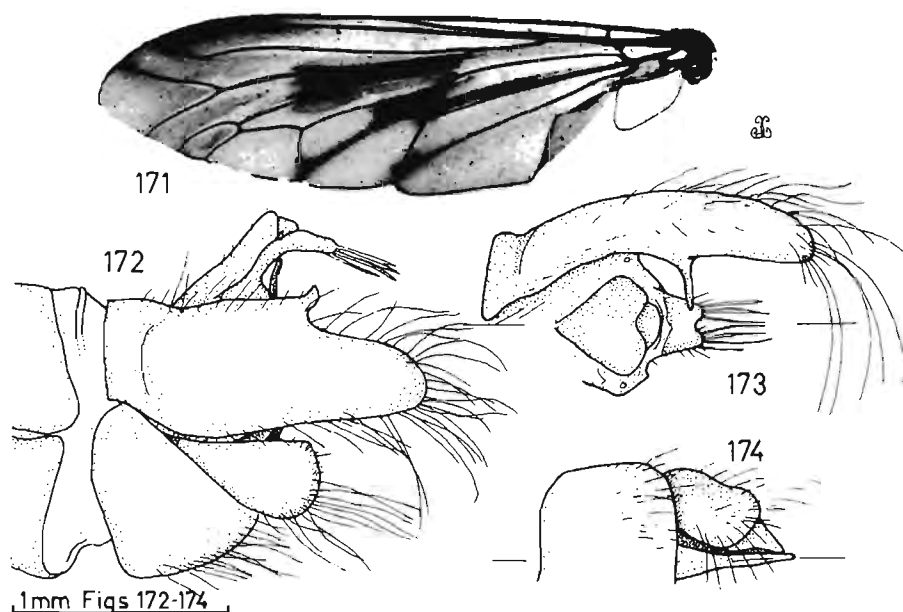
Neolophonotus vansoni, Bromley, 1936: 131–2, Hull, 1962: 532, Oldroyd, 1981: 341.

Redescription: Based on the holotype male.

Head: Antennae black; bristles and setae black ventrally, white dorsally. Eye:face ratio 1:0,21; eye:lower facial margin ratio 9,9:1. Mystax black and white mixed (white are longer). Occipital setae: upper—black; central—black and white; lower—white.

Thorax: ktg s and mtanepst s black. Mesonotal setae: acr black, anterior of suture; dc black, extend well anterior of suture; pprn bare; 3/3 black npl; 2/2 black spal; 1/1 black pal. Mane weak black anteriorly, stronger white posteriorly. Scutellum with 4 black marginal bristles, disc with 2 black bristles and three groups of white setae. Wing $6,5 \times 2,2$ mm; veins of central region characteristically brown-stained (Fig. 171); basal angle of cell r_4 — 49° . Legs dark red-brown; cx1 with white setae anteriorly; cx3 with 2 white bristles laterally. Hind femur with bristles and long setae black and white, short setae minute white.

Abdomen: Dark red-brown, fine silver-gold pruinose. T3 with 3 black and white marginal bristles; fine setae white. S3 with brown-yellow bristles and short white setae. ♂ genitalia as in Figs 172–174. Epandrium fairly elongate and bearing digitate, inwardly directed, dorsomedial process (best seen in dorsal aspect); subanale with long posteriorly directed marginal bristles; aedeagus slender and upwardly directed.



Figs 171–174. *Neolophonotus vansoni* Bromley, 1936 holotype ♂. 171. Wing. 172–174. Genitalia. 172. Lateral. 173. Dorsal. 174. Ventral.

Material examined: BOTSWANA: 3♂ (holotype & paratypes) 4♀ (allotype & paratypes), Metsimaklaba (Metsimaclaba siding—2426CA), 7–12.iii.1930, V.-L. Kal. Exp. (NM); 2♂ 1♀ 1? (paratypes), Damara Pan (2222AB), 15–21.iv.1930, V.-L. Kal. Exp. (NM); 1♂, Mboma Island, Moremi (2227DA) nr. Mboma Lagoon, 11.ix.1977, Russell-Smith, on track in *Hyperrrhaenia* grassland (NM); 2♂ 2♀, Okavango Delta, Shorobe (1923DA), 29 & 29.vi.1975, Russell-Smith, floodplain grassland (NM); 1♂, Maxwee grassland (?), vi.1976, Russell-Smith (NM); 1♂ 2♀, Okavango Delta, Maxwee (?), 4 & 15.ix. 28.viii.1975, Russell-Smith, floodplain grassland (NM); 1♀, Okavango Delta, Smiti Bridge, 19.ix.1957, Russell-Smith, floodplain grassland (NM); 1♀, Serowe (2226BC), 17.v.1983, Forchhammer, MT Ethyl Al (malaise trap with alcohol) (NM); 1♂ 1♀, W Okavango, Tsau River, Tsau (2022AB), 30.iii.1974, Nat Mus Bulawayo (NMZ); 1♂, Mochudi, Kgatleng District (SE 2426Ac), 19–21.iv.1982, Louw (NMB). ZIMBABWE: 1♂ (paratype), Bulawayo (2028BA), 19.iv.1924, Stevenson (NM); 2♂, Sawmills (1928CA), 11.iv.1920 9.vii.1923, Rhodesia Museum (NMZ); 1♂ 1♀, Salisbury (Harare—1731CC), v.1917, Tucker (SAM). SOUTH AFRICA: *Transvaal*: 1♂, Zoutpb Dist (Zoutpansberg—2230CC), 7.vii.1917, Breyer (NM); 5♂ 11♀, Boekenhoutskloof (2528CB) 30 km NE Pretoria, 23 29 31.iii. 7 9 14 16 17 21.iv. 1.v.1977, Bernon (NM). *Cape Province*: 6♂ 7♀, Roaring Sands Resprt nr. Witsand (2822CB), 17–18.iii.1982, Londt & Schoeman, Acacia woodland/sandy area (NM); 6♂ 1♀, 45 km SW Kuruman (2723CA), 24.iii.1982, Londt & Schoeman, Acacia woodland area (NM).

Distribution: The species has a wide distribution over Botswana and N Namibia, S & N Steppe and the N Transvaal climatic regions of southern Africa as well as western Zimbabwe.

Prey records: Diptera—Sepsidae (8), Muscidae (4); Orthoptera—Acrididae (1); Hemiptera—Miridae (1), ? Family (2); Lepidoptera—? Family (1).

Relationships: *N. vansonii* is closely related to *maculipennis*, *bromleyi*, *bamptoni* and *salina*.

ACKNOWLEDGEMENTS

I acknowledge the continued financial support of the Council for Scientific and Industrial Research (Foundation for Research Development) in the form of a Comprehensive Research Grant.

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Date received: 10 September 1986.

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